TAPR Digital Signal Processing Special Interest Group Archive, January 2000 through May 2003

January 2000 through May 2003

TAPR's forum for digital signal processing in amateur radio and digital communications, including DSP processors and development boards, algorithms, modems, software, hardware, and projects such as the TAPR/AMSAT DSP-93.

This volume contains 40 original monthly files and 673 messages, arranged chronologically. The PDF is a readable access copy: MIME transfer encodings are decoded, HTML bodies are converted to plain text, and non-text attachments are represented by descriptive notes. The raw source text is supplied separately with the Internet Archive item.

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January 2000

Original source file: dsp.0001
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0001

1. [dsp] Current Firmware?

From: "Diggs, Steve" <Diggs@daugherty.com>
Date: Sat, 1 Jan 2000 13:48:14 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57598-2000.01.01-14.04.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am looking for the current versions of the following source files:

bios2.asm - I have Version 1.26, dated 4/7/99

fsk1200.asm - I have Version 1.5, dated 10/23/97

flshboot.asm I have Version 1.8, dated 2/11/97

I've done a thorough search today trying to find home pages for the
respective authors, with no luck. If you can either point me to a URL where
the latest source can be found, I would greatly appreciate it. Please verify
that you are in fact pointing me to more recent code. There is a LOT OF OLD
CODE scattered around the Web relating to these files. Otherwise, simply
emailing it to me in zipped format will also work.

Thanks much for any and all replies.

Regards,
Steve Diggs, W4EPI

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: Current Firmware?

From: Douglas Braun <doug.braun@intel.com>
Date: Mon, 03 Jan 2000 13:57:58 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57999-2000.01.03-13.13.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The versons you mention below are the most recent versions of the ones that I maintain at:
<http://users.rcn.com/dougbert>

Doug
NA1DB

At 02:48 PM 1/1/00 , you wrote:
>I am looking for the current versions of the following source files:
>
>bios2.asm - I have Version 1.26, dated 4/7/99
>
>fsk1200.asm - I have Version 1.5, dated 10/23/97
>
>flshboot.asm I have Version 1.8, dated 2/11/97
>
>I've done a thorough search today trying to find home pages for the
>respective authors, with no luck. If you can either point me to a URL where
>the latest source can be found, I would greatly appreciate it. Please verify
>that you are in fact pointing me to more recent code. There is a LOT OF OLD
>CODE scattered around the Web relating to these files. Otherwise, simply
>emailing it to me in zipped format will also work.
>
>Thanks much for any and all replies.
>
>Regards,
>Steve Diggs, W4EPI
>
>
>---
>You are currently subscribed to dsp as: doug.braun@intel.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] DSP56002EVM D13 & D14 placement?

From: "Alan Biddle" <APBiddle@att.net>
Date: Thu, 6 Jan 2000 18:56:10 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-58674-2000.01.06-13.12.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I was wondering if there is an errata on the installation of these diodes in
the kit? The schematic looks a bit unusual.

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] RE: DSP56002EVM D13 & D14 placement?

From: "Diggs, Steve" <Diggs@daugherty.com>
Date: Thu, 6 Jan 2000 13:15:20 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-58679-2000.01.06-13.31.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alan,
I don't recall the function of these diodes, but I didn't deviate from the
instructions any, and my DSP is working fine.

Regards,
Steve Diggs, W4EPI

-----Original Message-----
From: Alan Biddle [mailto:APBiddle@att.net]
Sent: 1/06/2000 1:56 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] DSP56002EVM D13 & D14 placement?

I was wondering if there is an errata on the installation of these diodes in
the kit? The schematic looks a bit unusual.

Alan
WA4SCA

You are currently subscribed to dsp as: Diggs@daugherty.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] RE: DSP56002EVM D13 & D14 placement?

From: "Steven R. Bible" <srbible@gate.net>
Date: Thu, 6 Jan 2000 16:52:35 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-58705-2000.01.06-16.08.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alan,

What exactly is wrong, the EVMRI assembly instructions? Point me to the
right place so I can fix it. No one has identified this as a problem
(over 200 served :-).

- Steve, N7HPR

> -----Original Message-----
> From: bounce-dsp-3222@lists.tapr.org
> [mailto:bounce-dsp-3222@lists.tapr.org]On Behalf Of Alan Biddle

> Sent: Thursday, January 06, 2000 1:56 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] DSP56002EVM D13 & D14 placement?
>
>
> I was wondering if there is an errata on the installation of
> these diodes in
> the kit? The schematic looks a bit unusual.
>
> Alan
> WA4SCA
>
>
> ---
> You are currently subscribed to dsp as: SRBIBLE@GATE.NET
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] mil std 118-110A linux soundcard modem

From: g_and_s_pearce <g_and_s_pearce@xtra.co.nz>
Date: Sat, 08 Jan 2000 10:17:42 +1300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-58946-2000.01.07-15.33.59--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,
        what is the status of this modem .. discussed by
Robert McGwier in DCC 1999? Also called FS1052. In the article
he mentions that it will be released early 2000. Some hastle with
approval from the US government I think. Any chance of those of us
a little outside their sphere of influence getting it a little sooner?
        I recommend the article .. the standard is more clever
than I thought .. and I am keen to try it.
        As an aside .. have a squize at Phil Karns site at
people.qualcomm.com for an interesting patent violation!

        Cheers

        Stephen Pearce
        zl1any
        pearce@ieee.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] EVM PTT

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Fri, 7 Jan 2000 21:40:20 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-59003-2000.01.07-23.56.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

What condition should be on the PTT lead on transmit?
Should it be a ground? or +? or -?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] RE: EVM PTT

From: Rich Mulvey <mulveyr@iname.com>
Date: Sat, 08 Jan 2000 01:14:06 -0500 (EST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-59022-2000.01.08-00.30.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On 08-Jan-2000 PAT McGRATH wrote:
> What condition should be on the PTT lead on transmit?

> Should it be a ground? or +? or -?

   It will be pulled to ground.

- Rich

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: EVM PTT

From: "Thomas M. Alldread" <tma@mail.island.net>
Date: Sat, 08 Jan 2000 12:27:25 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-59129-2000.01.08-14.44.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Greetings Pat:

> What condition should be on the PTT lead on transmit?
> Should it be a ground? or +? or -?
>

Typically amateur radio transceiver PTT control circuits are designed active low thus a ground on the PTT lead is typically needed for the 'TX ON' state. The ULN2803 peripheral driver chips used to drive the PTT lead in my home brew version of the EVMRI are open collector output devices which invert the logic levels. Thus a logic high is needed out of the DSP56002 port to establish the logic low (near ground potential) transmit PTT condition.

BTW the EVM56002 TestTone program which can be downloaded from the TAPR site is intended to provide a user friendly method for testing the EVMRI control port outputs in addition to providing a method for setting up the interface TX audio levels. You may find it helpful.

73 & Enjoy,
Tom, VA7TA
tma@mail.island.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] RE: EVM PTT

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Sat, 8 Jan 2000 15:37:13 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-59153-2000.01.08-17.53.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Rich

Thanks for the reply.

----- Original Message -----
From: Rich Mulvey <mulveyr@iname.com>
To: TAPR DSP Special Interest Group <dsp@lists.tapr.org>
Sent: Friday, January 07, 2000 10:14 PM
Subject: [dsp] RE: EVM PTT

>
> On 08-Jan-2000 PAT McGRATH wrote:
> > What condition should be on the PTT lead on transmit?
> > Should it be a ground? or +? or -?
>
>
>   It will be pulled to ground.
>
> - Rich
>
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: EVM PTT

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Sat, 8 Jan 2000 15:39:39 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-59154-2000.01.08-17.55.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Tom

Thanks for the Great info

> >
>
> Typically amateur radio transceiver PTT control circuits are designed
> active low thus a ground on the PTT lead is typically needed for the 'TX
> ON' state. The ULN2803 peripheral driver chips used to drive the PTT
> lead in my home brew version of the EVMRI are open collector output
> devices which invert the logic levels. Thus a logic high is needed out
> of the DSP56002 port to establish the logic low (near ground potential)
> transmit PTT condition.
>
> BTW the EVM56002 TestTone program which can be downloaded from the TAPR
> site is intended to provide a user friendly method for testing the EVMRI
> control port outputs in addition to providing a method for setting up
> the interface TX audio levels. You may find it helpful.
>
> 73 & Enjoy,
> Tom, VA7TA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: EVM PTT

From: Douglas Braun <doug.braun@intel.com>
Date: Mon, 10 Jan 2000 10:24:17 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-59577-2000.01.10-09.40.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

One thing to look out for: The ULN2803's have a Darlington output circuit
(two transistors in series), which means that the on-state output voltage
  is about 0.8 volts or so. In other words, the output
is pulled mostly, but not completely, to ground. Some radios may
not be happy with this, and act funny. My own interface used to use
a ULN2083 to drive the up and down (mike-click) lines of my TS-50 (for PSK satellites)
but it turned out not to work, and I had to replace the circuit with
discrete transistors that gave a lower on-state output voltage.

Doug
NA1DB

At 03:27 PM 1/8/00 , you wrote:
>Greetings Pat:
>
> > What condition should be on the PTT lead on transmit?
> > Should it be a ground? or +? or -?
> >
>
>   Typically amateur radio transceiver PTT control circuits are designed
>active low thus a ground on the PTT lead is typically needed for the 'TX
>ON' state. The ULN2803 peripheral driver chips used to drive the PTT
>lead in my home brew version of the EVMRI are open collector output
>devices which invert the logic levels. Thus a logic high is needed out
>of the DSP56002 port to establish the logic low (near ground potential)
>transmit PTT condition.

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] DSP56002EVM

From: Murray Scott <ke8um@flash.net>
Date: Mon, 17 Jan 2000 17:04:32 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61055-2000.01.17-17.21.01--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am having trouble getting a DSP56002EVM from WYLE. They charged my
Visa card at the beginning of December but have not delivered. Phone
calls acknowledge the order but no information or product comes forth.
But of course TAPR came through and I have their kit to put the
DSP56002EVM into if I ever get it.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] Re: DSP56002EVM

From: Christian Void <cvoid@netcom.com>
Date: Mon, 17 Jan 2000 16:51:17 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61074-2000.01.17-19.07.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Mon, 17 Jan 2000, Murray Scott wrote:

> I am having trouble getting a DSP56002EVM from WYLE. They charged my
> Visa card at the beginning of December but have not delivered. Phone
> calls acknowledge the order but no information or product comes forth.
> But of course TAPR came through and I have their kit to put the
> DSP56002EVM into if I ever get it.

i just spoke to someone at monterey tools (where i ordered my EVM)
inquiring as to when it would ship. they told me that the EVMs have been
back ordered and are supposed to ship from motorola sometime this week,
so that may be why you have not received one yet.

either way, it was illegal of them to charge your credit card before
having the merchandise in hand to deliver to you. :)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] C libs etc.

From: Christian Void <cvoid@netcom.com>
Date: Mon, 17 Jan 2000 16:54:53 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61076-2000.01.17-19.11.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

is anyone out there using the motorola dsp development environment and
associated c compiler with thier evm? am wanting to write as much code as
possible in c and only rely on assembler when i have to. :)

if so, does anyone have any pointers to some sample code i can compile to
see if the environment and compiler (a gcc cross compiler) are working?

thanks in advance.

-christian <cvoid@netcom.com>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: C libs etc.

From: Douglas Braun <doug.braun@intel.com>
Date: Mon, 17 Jan 2000 20:05:58 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61078-2000.01.17-19.22.14--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

Yes, there is one. A couple of years ago, when I played with it,
you could get it from Motorola's Web site. I wrote some code
to make it easier to build Leonid (BIOS2) compatible executables
to interface with Leonid functions. You can find this stuff in n1owu_11.zip
on the TAPR Web site (or through a link at users.rcn.com/dougbert).

But be warned that the compiler does not generate very good code,
and does not use the 56002's fractional arithmetic or
modulo registers.

Doug
NA1DB (ex N1OWU)

At 07:54 PM 1/17/00 , you wrote:
>is anyone out there using the motorola dsp development environment and
>associated c compiler with thier evm? am wanting to write as much code as
>possible in c and only rely on assembler when i have to. :)
>
>if so, does anyone have any pointers to some sample code i can compile to
>see if the environment and compiler (a gcc cross compiler) are working?
>
>thanks in advance.
>
>-christian <cvoid@netcom.com>
>
>
>---
>You are currently subscribed to dsp as: doug.braun@intel.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] Re: DSP56002EVM

From: "John \"Chris\" Wren" <jcwren@jcwren.com>
Date: Mon, 17 Jan 2000 20:52:16 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61084-2000.01.17-20.08.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

No, it's not illegal. If they can't deliver the merchandise within 30
days, then they have to credit the charge, or ask what you want to do. At
that point, you can have the charge credited, or continue to wait for the
merchandise, carrying the charge. Many companies require proof of payment
before goods are shipped, to prevent a charge suddenly bouncing after
they've waited 5-10 days on an item that is out of stock.

----- Original Message -----
From: "Christian Void" <cvoid@netcom.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Monday, January 17, 2000 7:51 PM
Subject: [dsp] Re: DSP56002EVM

> On Mon, 17 Jan 2000, Murray Scott wrote:
>
> > I am having trouble getting a DSP56002EVM from WYLE. They charged my
> > Visa card at the beginning of December but have not delivered. Phone
> > calls acknowledge the order but no information or product comes forth.
> > But of course TAPR came through and I have their kit to put the
> > DSP56002EVM into if I ever get it.
>
> i just spoke to someone at monterey tools (where i ordered my EVM)
> inquiring as to when it would ship. they told me that the EVMs have been
> back ordered and are supposed to ship from motorola sometime this week,
> so that may be why you have not received one yet.
>
> either way, it was illegal of them to charge your credit card before
> having the merchandise in hand to deliver to you. :)
>
>
>
> ---
> You are currently subscribed to dsp as: jcwren@jcwren.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] doubts

From: Herminio Duque Lustosa <duque@ceb.unicamp.br>
Date: Tue, 18 Jan 2000 14:03:19 -0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61258-2000.01.18-10.13.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

I'm master's degree student in Biomedical Engineering of Unicamp - Brazil. I'm
developing a visosity meter for ultra-sound. I work with a BW of 1 MHz to 10 Mhz
and still to solve several complex calculations, as for example FFT. Like this,
an interesting solution would be the use of a DSP. After a time of research, I
decided to choose for the following boards of Motorola:
- DSP56824ADSA or
- DSP56307EVM.

The problem is that representative Motorola in Brazil doesn't market them.
Somebody would know how to find out as I could acquire them here in Brazil.
In the boards EVM an input of data can be connected? To connect to A/D converter
for example.

It would be very thankful for these answers.
Respectfully,

     Herminio
--
****
  Herminio Duque Lustosa
  Departamento de Engenharia Biomédica da Unicamp
  DEB/CEB-UNICAMP
  Caixa Postal 6040 - Campinas - SP - CEP: 13083-970
  Fone: 019 - 7887895/7888245   FAX: 019 - 2893346
  e-mail: duque@ceb.unicamp.br
****

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: C libs etc.

From: Christian Void <cvoid@netcom.com>
Date: Mon, 17 Jan 2000 17:19:18 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61082-2000.01.17-20.08.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Mon, 17 Jan 2000, Douglas Braun wrote:

> Yes, there is one. A couple of years ago, when I played with it,
> you could get it from Motorola's Web site. I wrote some code

this seems to be a fairly recent version (i.e. this year) and includes
development environments for a suprising amount of systems (i.e. sunos,
nt, etc).

> to make it easier to build Leonid (BIOS2) compatible executables
> to interface with Leonid functions. You can find this stuff in n1owu_11.zip
> on the TAPR Web site (or through a link at users.rcn.com/dougbert).

hey thanks, i'll take a look at that stuff (i actually have that archive
and am now kicking myself that i didn't look inside of it). :)

> But be warned that the compiler does not generate very good code,
> and does not use the 56002's fractional arithmetic or
> modulo registers.

does it generate good enough code to use for infrastructure coding, using
inline assembler for the neccessary processing routines? i am assuming

that it might be usable as a "driver" to glue bits of assembler together
in a (slightly) less painful manner?

-christian <cvoid@netcom.com>

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20. [dsp] Re: C libs etc.

From: Douglas Braun <doug.braun@intel.com>
Date: Wed, 19 Jan 2000 07:50:19 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61464-2000.01.19-10.06.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 05:19 PM 1/17/00 , you wrote:

>does it generate good enough code to use for infrastructure coding, using
>inline assembler for the neccessary processing routines? i am assuming
>that it might be usable as a "driver" to glue bits of assembler together
>in a (slightly) less painful manner?

Yes. Somewhere you will find working examples of Viterbi coding
and decoding routines written in C.

Although if you start getting used to the assembly language and
architecture of the 56002, the "glue" stuff becomes less of a pain...

Doug
NA1DB

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21. [dsp] RE: dsp digest: January 17, 2000

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Wed, 19 Jan 2000 17:15:31 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61483-2000.01.19-11.32.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

Looks like you at least made the cut. I just got a call from a nice lady at
Wyle-Huntsville who told me that Motorola was discontinuing the unit. She
said that they had already credited my card and suggested that I try Newark.

Alan
WA4SCA

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22. [dsp] Re: C libs etc.

From: Christian Void <cvoid@netcom.com>
Date: Wed, 19 Jan 2000 10:51:53 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61497-2000.01.19-13.09.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Wed, 19 Jan 2000, Douglas Braun wrote:

> Yes. Somewhere you will find working examples of Viterbi coding
> and decoding routines written in C.

cool, i will take a look.

> Although if you start getting used to the assembly language and
> architecture of the 56002, the "glue" stuff becomes less of a pain...

true. i have not read too much about the architecture of the 56002 yet,
but is it safe to assume it is relatively similar to other

motorola architectures (well, at least one other architecture)? :)

Christian Void /T71 | "I don't like it, and I'm sorry I | V/M/Research, Inc.
cvoid@netcom.com | ever had anything to do with it." | P.O. Box 170213
Tel. 1+415-998-0774 | -Erwin Schrodinger (1887-1961) | SF, CA 94117-0213
               * PGP v5.2.2 Public Key Available Via Finger *
                        http://www.morphine.com/void/

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23. [dsp] Re: C libs etc.

From: "Tim Baggett" <tbaggett@jump.net>
Date: Wed, 19 Jan 2000 22:34:56 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61578-2000.01.19-22.34.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> is anyone out there using the motorola dsp development environment and
> associated c compiler with thier evm? am wanting to write as much code as
> possible in c and only rely on assembler when i have to. :)

Your best bet would be to avoid the GNU C compiler for the 56K, and spend the
time with the assembler. The compiler doesn't do too good of a job on the DSP.
For example, it doesn't handle fractional data types nor does it support more
than one data space.

Regards,
Tim

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24. [dsp] Re: doubts

From: "Tim Baggett" <tbaggett@austintx.net>
Date: Wed, 19 Jan 2000 22:51:29 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61583-2000.01.19-22.50.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Herminio,

I'd recommend the DSP 56307EVM. First, it is a very powerful DSP with lots of
internal RAM. Second, the newer EVM boards will/do have many pins to which you
can easly access the peripheral signals of the DSP to interface your own
hardware. You may want to verify with Motorola that the new boards do have the
headers, as the original 56307EVMs did not (although I lobbied heavily for
their inclusion). Email dsphelp@dsp.sps.mot.com and ask there.

In addition, I have interfaced an 800 Ksps A/D to the 56303 EVM. If you are
interested in the details including schematic and assembly code snippets,
please email me privatly.

73,
Tim
AA5DF

----- Original Message -----
From: "Herminio Duque Lustosa" <duque@ceb.unicamp.br>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, January 18, 2000 10:03 AM
Subject: [dsp] doubts

I'm master's degree student in Biomedical Engineering of Unicamp - Brazil. I'm
developing a visosity meter for ultra-sound. I work with a BW of 1 MHz to 10
Mhz
and still to solve several complex calculations, as for example FFT. Like
this,
an interesting solution would be the use of a DSP. After a time of research, I
decided to choose for the following boards of Motorola:

- DSP56824ADSA or
- DSP56307EVM.

The problem is that representative Motorola in Brazil doesn't market them.
Somebody would know how to find out as I could acquire them here in Brazil.
In the boards EVM an input of data can be connected? To connect to A/D
converter
for example.

<snip>

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25. [dsp] Re: C libs etc.

From: Christian Void <cvoid@netcom.com>
Date: Thu, 20 Jan 2000 10:17:08 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61658-2000.01.20-12.14.41--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Wed, 19 Jan 2000, Tim Baggett wrote:

> Now that, it might be of some use. As you have read, Doug ported bios2 to C.
>
> I worked in Motorola's DSP group for three years. No one there ever used the
> Gnu C compiler. Of course, the alternative is to pay Tasking for their
> compiler (and pay you will...)

i'll pass on that.

> Hope I'm not too discouraging. I just intend to provide you with the straight
> facts before you spend a lot of time on it.

no, not discouraging at all. the only difference between assembler and c
to me is time. it just takes a bit longer to write in assembler, other
than that, code is code. and it will just force stuff to be a touch more
utilitarian than i would normally like, but oh well. :)

> I'm not even sure the compiler is being maintained any more....

hrmmm... i dunno. have to see if anything has changed between what i've
found on the net and motorola's dev distribution.

Christian Void /T71 | "I don't like it, and I'm sorry I | V/M/Research, Inc.
cvoid@netcom.com | ever had anything to do with it." | P.O. Box 170213
Tel. 1+415-998-0774 | -Erwin Schrodinger (1887-1961) | SF, CA 94117-0213
                * PGP v5.2.2 Public Key Available Via Finger *
                         http://www.morphine.com/void/

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26. [dsp] DSP56002 Replaced by 56xxx??

From: "Diggs, Steve" <Diggs@daugherty.com>
Date: Thu, 20 Jan 2000 15:23:52 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61745-2000.01.20-15.20.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

We have been hearing increasing difficulties in getting the DSP56002EVM from
various Motorola distributors recently, and that brings up the subject of a
replacement from the Big M. When I bought my 56KEVM from Wyle, they said
Motorola was almost out, and that it would be quite some time before they
built another batch. It now seems like they might not even build any more
56002 EVM kits, as they have updated the base chip itself and likely have an
EVM for it.

So what are our options? Is there a newer version chip in this family? Will
the code written so far work with the newer versions? Has anybody priced out
that replacement? Does it call for a change in the TAPR build-out kit?

Inquiring minds want to know..

Regards,
Steve Diggs, W4EPI

<<Stephen S. Diggs (E-mail).vcf>>
[Attachment: Stephen S. Diggs (E-mail).vcf; application/octet-stream; 525 bytes]

27. [dsp] Re: DSP56002 Replaced by 56xxx??

From: Jake Janovetz <janovetz@tempest.ece.uiuc.edu>
Date: Thu, 20 Jan 2000 15:46:48 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61752-2000.01.20-15.44.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The 56002s are pretty much replaced by the 5630x family. The code
is damn-near-compatible, with a few changes needed in chip setup, etc.
You can also get the 5630x to run _much_ quicker.

But, by the time the TAPR folks upgrade to the 5630x, I'm sure they
will be pretty close to deprecated as well. It will then be time for
a member of the StarCore family. (which is also close as far as
the assembly code goes, but definitely requires changes to code. --
the assembly looks familiar, but it incompatible)

If it were me, I'd start designing around a StarCore and get going
with the new technology. As I recall, the 5630x was out by the time
TAPR started using the 56002.

Cheers,
Jake

On Thu, Jan 20, 2000 at 03:23:52PM -0600, Diggs, Steve wrote:
> We have been hearing increasing difficulties in getting the DSP56002EVM from
> various Motorola distributors recently, and that brings up the subject of a
> replacement from the Big M. When I bought my 56KEVM from Wyle, they said
> Motorola was almost out, and that it would be quite some time before they
> built another batch. It now seems like they might not even build any more
> 56002 EVM kits, as they have updated the base chip itself and likely have an
> EVM for it.
>
> So what are our options? Is there a newer version chip in this family? Will
> the code written so far work with the newer versions? Has anybody priced out
> that replacement? Does it call for a change in the TAPR build-out kit?
>
> Inquiring minds want to know..
>
> Regards,
> Steve Diggs, W4EPI
>
> <<Stephen S. Diggs (E-mail).vcf>>

--
janovetz@uiuc.edu | How can it be that mathematics, being after all a
University of Illinois | product of human thought independent of experience,
| is so admirably adapted to the objects of reality?
PP-ASEL | - Albert Einstein

Disclaimer: The policies of this University certainly do not reflect my
own opinions, objectives, or agenda.

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

28. [dsp] Re: DSP56002 Replaced by 56xxx??

From: "Tim Baggett" <tbaggett@jump.net>
Date: Thu, 20 Jan 2000 19:09:54 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61772-2000.01.20-19.09.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

----- Original Message -----
From: "Diggs, Steve" <Diggs@daugherty.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, January 20, 2000 3:23 PM

Subject: [dsp] DSP56002 Replaced by 56xxx??

> We have been hearing increasing difficulties in getting the DSP56002EVM from
> various Motorola distributors recently, and that brings up the subject of a
> replacement from the Big M. When I bought my 56KEVM from Wyle, they said
> Motorola was almost out, and that it would be quite some time before they
> built another batch. It now seems like they might not even build any more
> 56002 EVM kits, as they have updated the base chip itself and likely have an
> EVM for it.

I confirmed this with folks in Motorola's DSP group. It has been decided to
discontinue the DSP56002EVM.

I am both sad and yet not surprised.

The reason for the discontinuation is due to the inavailability of the SRAM
memory used on the EVM. This was beginning to be a problem a few years ago
when I was a member of this group. Although they could redesign the 56002EVM
to use newer SRAM, the costs out weigh the benefits.

In addition, the costs to manufacture the 56002 is higher than the 5630x
devices. The '002 is an old technology, therefore silicon features are much
larger than those on the newer DSPs. This leads to larger die sizes, fewer die
per wafer, and therefore higher manufacturing costs. Newer devices are in
newer technologies that scale down to smaller sizes, more per wafer, less
cost, and more performance.

Note that this is *only* the EVM I am talking about discontinueing. I know
nothing of the DSP itself.

>
> So what are our options? Is there a newer version chip in this family? Will
> the code written so far work with the newer versions? Has anybody priced out
> that replacement? Does it call for a change in the TAPR build-out kit?

The newer chip family is not really that new. The 56002 is ancient technology,
really. The 5630x family DSP was introduced in late 1995 I think. Their newest
generation of DSP chips is StarCore which you can read quite a bit about.

The 5630x family is code compatible with the 56002 code. It does contain many
instruction set enhancements, and will exeucte one instruction per clock,
rather than one instruction in two clocks as in the '002 (already, a 2X
improvement in performance). Also, the 5630x contains much more internal RAM
than the '002.

Differences which will affect the current set of DSP56002EVM applications out
there will be due to peripherals on the chip and the EVM. The 5630x DSPs have
many more peripherals than the '002, and some of the registers and
functionality changed.

I believe there are some differences in the CODEC used on the EVM as well,
although they both use Crystal codecs (the CS4215 used on the '002 EVM is also
very old, and probably is yet another reason for discontinuing the EVM).

As for the TAPR build kit, yes there will be changes required. Primary
differences are that the 5630x is a 3.3 v I/O device, new CODEC analog
interfacing, and interfacing to new GPIO pins.

However, a sore spot with the new EVMs regarding the TAPR interface kit is
that (much to my disagreement at the time) the 5630x EVMs do not include much
expansion ability due to the lack or header pins to access the DSP peripheral
signals. This could be changing however with a new EVM board (the 56309EVM
looks promising).

So, there's the scoop.

Tim

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29. [dsp] Re: C libs etc.

From: "Tim Baggett" <tbaggett@jump.net>
Date: Thu, 20 Jan 2000 19:17:21 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61773-2000.01.20-19.16.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Christian,

> no, not discouraging at all. the only difference between assembler and c
> to me is time. it just takes a bit longer to write in assembler, other
> than that, code is code. and it will just force stuff to be a touch more
> utilitarian than i would normally like, but oh well. :)

With this thought, I'd suggest assembly then. I believe you will spend more time fighting the Gnu C compiler from Moto, than if you just stick to assembly (plus your code will be faster). The assembler is actually very good, and has many advanced features to allow you to modularize your code, create libraries, then link it all together.

Sorry, I didn't ask about if the C Compiler is being maintained while at lunch today.

Tasking does sell a 5630x compiler/assembler/linker/debugger suite. I think the object file it produces is finally compatible with Motorola's debugger as well. Seems like it cost something like $3000.

I think it is www. tasking.com.

Tim

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30. [dsp] Re: DSP56002 Replaced by 56xxx??

From: "Tim Baggett" <tbaggett@jump.net>
Date: Thu, 20 Jan 2000 19:24:16 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61775-2000.01.20-19.23.41--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

----- Original Message -----
From: "Jake Janovetz" <janovetz@tempest.ece.uiuc.edu>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, January 20, 2000 3:46 PM
Subject: [dsp] Re: DSP56002 Replaced by 56xxx??

> But, by the time the TAPR folks upgrade to the 5630x, I'm sure they
> will be pretty close to deprecated as well. It will then be time for
> a member of the StarCore family.

> If it were me, I'd start designing around a StarCore and get going
> with the new technology. As I recall, the 5630x was out by the time
> TAPR started using the 56002.

Certainly not due to a lack of trying. Many hours were spent on this...you just weren't involved. Be careful poking fingers at the volunteers ;-) They *are* (were?) looking ahead.

> (which is also close as far as
> the assembly code goes, but definitely requires changes to code. --
> the assembly looks familiar, but it incompatible)

Incompatible certainly! take a closer look! *totally* different architecture.

They are still using assembly to highly optimize code modules, although not expected to be the norm.

73,
Tim

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31. [dsp] Re: C libs etc.

From: Douglas Braun <doug.braun@intel.com>
Date: Thu, 20 Jan 2000 18:18:34 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61787-2000.01.20-20.15.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

This is a good point. Today, most of our EVM applications are written
as a big monolithic chunk of code, with hardly any subroutines, much
less a proper code library. The assembler and linker will do "proper"
relocatable object module generation, and it could be possible
to write much more modular and reusable applications.

At 05:17 PM 1/20/00 , you wrote:

>With this thought, I'd suggest assembly then. I believe you will spend more
>time fighting the Gnu C compiler from Moto, than if you just stick to assembly
>(plus your code will be faster). The assembler is actually very good, and has
>many advanced features to allow you to modularize your code, create libraries,
>then link it all together.

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32. [dsp] Re: DSP56002 Replaced by 56xxx??

From: Jake Janovetz <janovetz@tempest.ece.uiuc.edu>
Date: Thu, 20 Jan 2000 21:59:44 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61803-2000.01.20-21.56.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Thu, Jan 20, 2000 at 07:24:16PM -0600, Tim Baggett wrote:
> > But, by the time the TAPR folks upgrade to the 5630x, I'm sure they
> > will be pretty close to deprecated as well. It will then be time for
> > a member of the StarCore family.
>
> > If it were me, I'd start designing around a StarCore and get going
> > with the new technology. As I recall, the 5630x was out by the time
> > TAPR started using the 56002.
>
> Certainly not due to a lack of trying. Many hours were spent on this...you
> just weren't involved. Be careful poking fingers at the volunteers ;-) They
> *are* (were?) looking ahead.

I certainly didn't mean it this way. What I meant was that it takes
people a long time to design and build something in their spare time.
(I've been stung by this, too.) And, if you don't start designing
around something that isn't quite out, you'll find that by the time it
is finished, the technology is going away.

At this point, the 30x is old hat. It's been around the block. The
3.3v part was deprecated by a split voltage 3.3v/2.5v periph/core
part, etc. If you start a new design now and release it in a year,
it may have a year (two tops) of useful life. My recommendation is
to start with something else. The StarCore or perhaps some TI stuff.

The design cycle is being forced shorter. Look at the FHSS project.
Parts have disappeared or become unnecessary over the design period.
Volunteers do a fantastic job, but they are slow. (All my personal
projects take 4-6 times longer than they should) They might not
like hearing it, but they have to take it as helpful criticism and
work around it. Start designing on "Preliminary Datasheets." Then,
by the time they're in production, the datasheets won't read:
"Old part -- not recommended for new designs"

> > (which is also close as far as
> > the assembly code goes, but definitely requires changes to code. --
> > the assembly looks familiar, but it incompatible)
>
> Incompatible certainly! take a closer look! *totally* different architecture.

Yes, absolutely. Everything will need to be re-written. However,
for people used to the assembler, they don't have a huge shift.
Sure, more registers, different names, parallel moves are all different,
etc. But it is nowhere near the shift required for Motorola --> TI.

The architecture is an EPIC architecture designed to be compiler-friendly.
Hopefully, Motorola will be compiler-friendly and offer tools for a
reasonable cost.

Cheers,
Jake

--
janovetz@uiuc.edu | How can it be that mathematics, being after all a
University of Illinois | product of human thought independent of experience,
| is so admirably adapted to the objects of reality?
PP-ASEL | - Albert Einstein

Disclaimer: The policies of this University certainly do not reflect my
own opinions, objectives, or agenda.

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

33. [dsp] Re: 56002 and C libs

From: FoulCraven@aol.com
Date: Fri, 21 Jan 2000 05:02:46 EST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-61845-2000.01.21-03.59.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Tim Baggett wrote:
>Note that this is *only* the EVM I am talking about discontinueing. I know
>nothing of the DSP itself.

There are no immediate plans to discontinue the DSP56002 device itself, since
there are still many people using it and it is still making Motorola money.
It should be around for another couple of years.

>I believe there are some differences in the CODEC used on the EVM as well,
>although they both use Crystal codecs (the CS4215 used on the '002 EVM
>is also very old, and probably is yet another reason for discontinuing
>the EVM).

The newer DSP563xx (excluding the digital audio boards) use the Crystal
CS4218, which has a slightly different interacing scheme than the CS4215.
The data and control for the CS4218 are separate, but the codec code
supplied with the EVMs pretty much emulates the CS4215 version and behaves
the same way. It should not be difficult to port code from the CS4215 to
the CS 4218.

>However, a sore spot with the new EVMs regarding the TAPR interface kit
>is that (much to my disagreement at the time) the 5630x EVMs do not
>include much expansion ability due to the lack or header pins to access
>the DSP peripheral signals. This could be changing however with a new EVM
>board (the 56309EVM looks promising).

Unfortunately, the 303 (100 MHz), 307 and 309 EVMs do not have the address
and data bus brought out to headers, and there are no plans that I know of
to redesign them to include them (especially in light of the newly
consolidated Tools group at Motorola). The 311EVM does have the full
expansion capability, but the board is still in beta at the moment. As
far as TAPR's use of the boards, the external address and data buses are
not currently used. These EVMs come with FLASH on the board included.

As far as the GNU C compiler, it has been abandoned for quite some time
now and very little support is available for it. It is surprising to see
how many people are still using it for real products... The pain and
grief required to use it and get around its bugs and lack of documentation,
I think, outweigh its use in anything but amateur (ham or school) projects.

Regards,
David DiCarlo
wb2liv

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

34. [dsp] OFDM

From: "Marius Hauki" <Marius.Hauki@datarespons.no>
Date: Wed, 26 Jan 2000 14:28:40 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62644-2000.01.26-07.28.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Is somebody on this list involved in any OFDM tests / work ?
The reason for the post to DSP is that the OFDM signal processing requires
IFFT / FFT algoritms to generate the QAM modulation vectors. This
is best done with algorithms running on DSP hardware.
Many people complain about amateur radio beeing way behind
the frontier. OFDM would be a way to be at the frontier.

73 de LA9EEA
Marius Hauki

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

35. [dsp] Re: OFDM

From: Charles Brain <chbrain@dircon.co.uk>
Date: Wed, 26 Jan 2000 13:51:30 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62648-2000.01.26-07.53.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Marius Hauki wrote:
>
> Is somebody on this list involved in any OFDM tests / work ?

Hello Marius,

Well the modem I use for digital voice is a 36 tone OFDM modem that
uses QPSK.

A while back I was experimenting with a 52 tone modem that used 16QAM
on each of the carriers. It was part of an experiment to pass much higher
speed data over standard FM radios than standard packet.

The idea was to use ARQ and bit loading, the receiver would tell the
transmitter which tones it had the best S/N ratio on, that way the tx
could optimize its transmit characteristics. But I never progressed
much with it because other projects came up.

- Charles G4GUO

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

36. [dsp] Re: OFDM

From: Johan Forrer <forrerj@peak.org>
Date: Wed, 26 Jan 2000 08:45:34 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62671-2000.01.26-10.43.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Marius,

Glad you asked .... You may be surprized at what has
been achieved in our amateur world concerning OFDM.
Have a look at MT63 also Q15X25 as examples. That basically
employs OFDM techniques and other necessary technology
that makes up a viable digital data communications systems.

You may want to peak at the materials on my web page (see below.)
There you will find some source code for various DSP platforms
also PC-based DSP OFDM using FFT/IFFT engines as you inquired.

Pretty neat stuff, but unfortunately not new. The latest
breakthroughs are mostly related to doing it on PCs using
sound cards. Making all this magic work under a common
desktop OS is part of the challenge. That effectively brings these
appliciations to the masses. Perhaps you have some new ideas

to contribute? We would love to hear about that.

If you have further questions, please ask; there are
a number of experts frequenting this and other lists
that would be happy to answer your question and might even
have some practical experiences to share.

73,

Johan, KC7WW

On Wed, 26 Jan 2000, Marius Hauki wrote:

> Is somebody on this list involved in any OFDM tests / work ?
> The reason for the post to DSP is that the OFDM signal processing requires
> IFFT / FFT algoritms to generate the QAM modulation vectors. This
> is best done with algorithms running on DSP hardware.
> Many people complain about amateur radio beeing way behind
> the frontier. OFDM would be a way to be at the frontier.
>
> 73 de LA9EEA
> Marius Hauki
>
>
>
> ---
> You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

37. [dsp] IC-821H & EVM

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Wed, 26 Jan 2000 15:51:39 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62728-2000.01.26-17.48.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am going to interface a Icom IC-821H with the DSP56002EVM.

I need advise on what connections on the EVM socket should be connected to
what pin on the 821H accessory socket.

I intend to operate both the 9600 and PSK satellites.

Any advise would be appreciated.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

38. [dsp] IC821 and EVM

From: Douglas Braun <doug.braun@intel.com>
Date: Wed, 26 Jan 2000 20:15:01 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62743-2000.01.26-19.22.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I also use my IC821 and EVM for PSK and FM sats.

For all operating modes (terrestrial 1200, terrestrial/sat 9600, and sat PSK xmit),
you should leave the radio in 9600 mode. Thus, all FM transmit audio goes to
the direct modulator input, pin 4 on the radio's accessory socket.

Receiving is more complicated, partly because the receive audio setup on
the radio is confusing. If the radio is left in 9600 mode, pin
5 will have the direct detector output, which is what you need for 9600,
and what you really should use for 1200 FM as well. For SSB PSK reception,
you can get the "normal" RX audio on pin 1 when the radio is in 9600 mode.
Strangely, this pin is silent in non-9600 mode!

To summarize:

1: Leave the radio in 9600 mode
2: XMIT audio always to radio acc. socket pin 4.
2: RX audio from pin 5 for all FM modes, and pin 1 for SSB (PSK).

My EVM setup has a software-controlled relay to switch one CODEC
input between pins 5 and 1. You could also send each one to a
different CODEC channel (after patching the appropriate
programs to listen to the correct channel). Or you
could put a toggle switch somewhere.

You could also listen only to pin 5, and switch the radio out of
9600 mode when doing PSK satellites. But then you would not be
sending the xmit audio directly to the FM modulator. Besides, I got
tired of always forgetting to do that, and I switched to the
software-controlled approach I described above...

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

39. [dsp] Re: OFDM

From: "Marius Hauki" <Marius.Hauki@datarespons.no>
Date: Thu, 27 Jan 2000 11:51:51 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62847-2000.01.27-04.51.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Johan Forrer wrote:

> Marius,
>
> Glad you asked .... You may be surprized at what has
> been achieved in our amateur world concerning OFDM.
> Have a look at MT63 also Q15X25 as examples. That basically
> employs OFDM techniques and other necessary technology
> that makes up a viable digital data communications systems.
>
> You may want to peak at the materials on my web page (see below.)
> There you will find some source code for various DSP platforms
> also PC-based DSP OFDM using FFT/IFFT engines as you inquired.
>
> Pretty neat stuff, but unfortunately not new. The latest
> breakthroughs are mostly related to doing it on PCs using
> sound cards. Making all this magic work under a common
> desktop OS is part of the challenge. That effectively brings these
> appliciations to the masses. Perhaps you have some new ideas
> to contribute? We would love to hear about that.
>
> If you have further questions, please ask; there are
> a number of experts frequenting this and other lists
> that would be happy to answer your question and might even
> have some practical experiences to share.
>
> 73,
>
> Johan, KC7WW
>

Hi Johan,
this looks interesting. Thanks for answering.

The idea I have been playing with is to take a high speed
bit stream from e.g. a video wavelet compressor and make a manageable
transport stream out of that. Then transmit that at S-band (13cm)
as digital Amateur Television (ATV).
One of the major problems on theese frequencies is the multipath.
I was thinking that if we implemented the DSP functions in hardware using VHDL and
FPGA technology we could upscale what is already done at HF.
Of course we would have to use I/Q modulators and some other method
of actually generating the signal. The baseband approach would not be practical at theese
frequencies.

I would like to hear your opinions on this.

73 de LA9EEA
Marius Hauki

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

40. [dsp] Re: IC821 and EVM

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Thu, 27 Jan 2000 08:36:05 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62884-2000.01.27-10.33.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Doug

Thanks for your reply. The information was just what I needed.

Since pin 4 is the EVM RX what other pin did you use for RX on the EVM?
I assume you would use both radio inputs. One for FM and the other for SSB
then in the software just change the receiver input. Is this what you did?

Should pin 8 on the EVM be connected to Pin 8 on the 821H for frequency
up/down?

> My EVM setup has a software-controlled relay to switch one CODEC
> input between pins 5 and 1. You could also send each one to a
> different CODEC channel (after patching the appropriate
> programs to listen to the correct channel). Or you
> could put a toggle switch somewhere.
>
> You could also listen only to pin 5, and switch the radio out of
> 9600 mode when doing PSK satellites. But then you would not be
> sending the xmit audio directly to the FM modulator. Besides, I got
> tired of always forgetting to do that, and I switched to the
> software-controlled approach I described above...
>
> Doug
> NA1DB
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

41. [dsp] Re: IC821 and EVM

From: Douglas Braun <doug.braun@intel.com>
Date: Thu, 27 Jan 2000 12:55:20 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62887-2000.01.27-11.54.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 11:36 AM 1/27/00 , you wrote:
>Hi Doug
>
>Thanks for your reply. The information was just what I needed.
>
>Since pin 4 is the EVM RX what other pin did you use for RX on the EVM?
>I assume you would use both radio inputs. One for FM and the other for SSB
>then in the software just change the receiver input. Is this what you did?

I am not sure which pins are which on the TAPR EVM interface, since I
do not have one. I used the right CODE input channel for my IC821, and
I have the relay switch it to the correct pin on the IC821.

The left input channel of my EVM was connected to my HF rig. If you are using only
the IC821 with the EVM, you could certainly connect one input channel to each of
the IC821 output pins. The EVM software will have to listen to the correct channel,
of course. The versions of g3ruh.asm and psk.asm oon my Web page (users.rcn.com/dougbert)
have compile-time settings for left vs. right channel usage.

>Should pin 8 on the EVM be connected to Pin 8 on the 821H for frequency
>up/down?

This is a bit tricky. The IC821 up/down input needs to be grounded for
"up", and grounded through a resistor for "down". (or vice-versa?)
The voltage drop across the driver ICs on the EVM board may mess this up.
I believe I had to use discrete transistors to drive the up/down line
to avoid this problem. Then the driver IC "grounds" an output, it
will actually have a voltage of about +0.7v. An open-collector
transistor output will have only 0.1v or so. So, you may
need to modify the EVM interface board...

Let me know if I have gotten you more, instead of less, confused. :-)

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

42. [dsp] Re: OFDM

From: Alberto di Bene <dibene@usa.net>
Date: Fri, 28 Jan 2000 11:56:28 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-62994-2000.01.28-04.54.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>
> Subject: OFDM
> From: "Marius Hauki" <Marius.Hauki@datarespons.no>
> Date: Wed, 26 Jan 2000 14:28:40 +0100
> X-Message-Number: 1
>
> Is somebody on this list involved in any OFDM tests / work ?
> The reason for the post to DSP is that the OFDM signal processing requires
> IFFT / FFT algoritms to generate the QAM modulation vectors. This
> is best done with algorithms running on DSP hardware.
> Many people complain about amateur radio beeing way behind
> the frontier. OFDM would be a way to be at the frontier.
>
> 73 de LA9EEA
> Marius Hauki
>
> --

Marius,
                are you absolutely sure you need DSP hardware for what you want
to do ? That was also my convincement, until I came across to the Intel Signal
Processing Library, an highly optimized library for their Pentium family of processors.
In it you can find a lot of routines, about FFT, IFFT, FIR, IIR, Goertzel, LMS, you name
it.
All precoded and tested, and easily callable from C programs. And the measured
(at least by me) speed is comparable with that of a 56002 or a 320C50, if you have at
least
a 200 MHz Pentium (an obsolete CPU, by today's standards).
And the price cannot be beaten. I downloaded it for free from the Intel site.
Try to look starting from here : http://developer.intel.com/drg/pentiumiii/tools/spl1.htm

73s
Alberto   I2PHD

P.S. I have no affiliation with Intel, being just a satisfied user of their SPL.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

43. [dsp] Re: OFDM

From: Alberto di Bene <dibene@usa.net>
Date: Fri, 28 Jan 2000 14:50:15 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63005-2000.01.28-07.48.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

This is a follow-on to my previous message.
I checked the URL I gave you previously, and, though possible, it is
a bit clumsy to get at the correct page for SPL. Go there directly with
this link :   http://developer.intel.com/vtune/perflibst/spl/index.htm

>From the menu on the left side select 'Download and Install'.
You will be asked to register, but otherwise the downloading is free.

Alberto   I2PHD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

44. [dsp] Re: OFDM

From: "Marius Hauki" <Marius.Hauki@datarespons.no>
Date: Fri, 28 Jan 2000 14:53:36 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63006-2000.01.28-07.53.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alberto di Bene wrote:

> This is a follow-on to my previous message.
> I checked the URL I gave you previously, and, though possible, it is
> a bit clumsy to get at the correct page for SPL. Go there directly with
> this link :   http://developer.intel.com/vtune/perflibst/spl/index.htm
>
> >From the menu on the left side select 'Download and Install'.
> You will be asked to register, but otherwise the downloading is free.
>
> Alberto   I2PHD
>
> ---
> You are currently subscribed to dsp as: MARIUS@DATARESPONS.NO
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Thanks Alberto. I will check this out.

For low bw. applications this looks fine.
If one wanted to increase bw. a lot, I think an FPGA soultion would
be neccessary. A nice way of doing some concept verification and
testing would be the software route.

73 de LA9EEA
Marius

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

45. [dsp] RE: dsp digest: January 27, 2000

From: "Lanier, Robert" <rlanier@harris.com>
Date: Fri, 28 Jan 2000 09:26:49 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63011-2000.01.28-08.23.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Marius,

If you need any help with the VHDL, let me know. I've been writing VHDL at work
for almost 4 years, so I have a pretty good grasp on the language.

Tony K4YYZ

-----Original Message-----
From: TAPR DSP Special Interest Group digest [mailto:dsp@lists.tapr.org]
Sent: Friday, January 28, 2000 1:01 AM
To: dsp digest recipients
Subject: dsp digest: January 27, 2000

Hi Johan,

this looks interesting. Thanks for answering.

The idea I have been playing with is to take a high speed
bit stream from e.g. a video wavelet compressor and make a manageable
transport stream out of that. Then transmit that at S-band (13cm)
as digital Amateur Television (ATV).
One of the major problems on theese frequencies is the multipath.
I was thinking that if we implemented the DSP functions in hardware using VHDL
and
FPGA technology we could upscale what is already done at HF.
Of course we would have to use I/Q modulators and some other method
of actually generating the signal. The baseband approach would not be practical
at theese
frequencies.

I would like to hear your opinions on this.

73 de LA9EEA
Marius Hauki

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

46. [dsp] DSP56002EVM availability

From: Christian Void <cvoid@netcom.com>
Date: Fri, 28 Jan 2000 14:19:19 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63100-2000.01.28-16.16.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

seems the last place on the planet with dsp56002evm's is
avnet-marshall... they currently have two in stock in addition to the one
i just purchased. your mileage may vary, work them on the price, they
bend. :)

so if someone needs one, give them a call: 800-332-8638

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

47. [dsp] RE: DSP56002EVM availability

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Sat, 29 Jan 2000 17:32:21 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63268-2000.01.29-11.29.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Try Monterrey Tools also. They have them, and have got their price in line
now.

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

48. [dsp] RE: DSP56002EVM availability

From: "Steven R. Bible" <srbible@gate.net>
Date: Sat, 29 Jan 2000 16:17:03 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63299-2000.01.29-15.14.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Here is the Monterey Tools URL for the DSP56002EVM

    http://www.montereytools.com/MontereyTools/Motorola_DSP56002EVM.html

Price says $160.00. Not to bad considering the price use to be $149.00.
I'm sure you'll have to add shipping and handling.

I don't know how many they have in stock. If anyone finds out, could
they post to the list. I have no vested interest in Monterey Tools.
Your milage may vary.

- Steve, N7HPR

> -----Original Message-----
> From: bounce-dsp-3222@lists.tapr.org
> [mailto:bounce-dsp-3222@lists.tapr.org]On Behalf Of Alan Biddle
> Sent: Saturday, January 29, 2000 12:32 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] RE: DSP56002EVM availability
>
>
> Try Monterrey Tools also. They have them, and have got their
> price in line
> now.
>
> Alan
> WA4SCA
>
>
> ---
> You are currently subscribed to dsp as: SRBIBLE@GATE.NET
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

49. [dsp] RE: DSP56002EVM availability

From: Christian Void <cvoid@netcom.com>
Date: Sat, 29 Jan 2000 18:30:53 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63350-2000.01.29-20.28.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

monterey tools does not have any in stock and cannot get them. i
originally ordered from them and was told it was being drop shipped from
motorola. alas, on friday i was told by monterey tools that "they can no
longer get them from motorola".

so unless something changed since yesterday, i think monterey is out. :(

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

50. [dsp] RE: DSP56002EVM availability

From: Charles Brain <chbrain@dircon.co.uk>
Date: Sun, 30 Jan 2000 07:57:42 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63403-2000.01.30-01.58.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Folks,

It looks as if we are going to have to start looking for another platform.
Maybe we should start looking at a standard DSP library for future development.
So when this happens again it won't be such an awful job to port the code.

It is a shame the Intel DSP libraries don't support Linux, especially after I read
they have ported Linux to their new 64 bit range of chips. I did an FFT routine in
C and found that the Intel code runs twice as fast :-(So much for my code optimization.

- Charles G4GUO

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

51. [dsp] RE: DSP56002EVM availability

From: "Tim Baggett" <tbaggett@austintx.net>
Date: Sun, 30 Jan 2000 12:32:00 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63466-2000.01.30-12.32.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

----- Original Message -----
From: "Charles Brain" <chbrain@dircon.co.uk>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Sunday, January 30, 2000 1:57 AM
Subject: [dsp] RE: DSP56002EVM availability

> It looks as if we are going to have to start looking for another platform.
> Maybe we should start looking at a standard DSP library for future
development.
> So when this happens again it won't be such an awful job to port the code.

What is so non-standard and difficult about porting 56002 code to 5630x?

Now, I agree porting code from the DSP-93 (TI) to the EVM must have been
difficult!

Tim

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

52. [dsp] RE: DSP56002EVM availability

From: Charles Brain <chbrain@dircon.co.uk>
Date: Mon, 31 Jan 2000 09:48:49 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63590-2000.01.31-03.51.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Tim Baggett wrote:
>
>
> What is so non-standard and difficult about porting 56002 code to 5630x?
>
> Now, I agree porting code from the DSP-93 (TI) to the EVM must have been
> difficult!
>

If we could find someway of speeding up development and making it easy to
port between platforms I feel it would be helpful.

PSK31 has shown that the real consumer demand is for the P.C platform and
not EVMs unfortunately.

- Charles

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

53. [dsp] RE: DSP56002EVM availability

From: Herminio Duque Lustosa <duque@ceb.unicamp.br>
Date: Mon, 31 Jan 2000 10:31:00 -0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63601-2000.01.31-06.21.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

One question about the board DSP56002EVM: Can it run stand alone after programmed?

Thanks,

Duque

--
****
Herminio Duque Lustosa
Departamento de Engenharia Biomédica da Unicamp
DEB/CEB-UNICAMP
Caixa Postal 6040 - Campinas - SP - CEP: 13083-970
Fone: 019 - 7887895/7888245 FAX: 019 - 2893346
e-mail: duque@ceb.unicamp.br
****

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54. [dsp] FW: Important TI DSP Announcement

From: "Lanier, Robert" <rlanier@harris.com>
Date: Mon, 31 Jan 2000 09:33:13 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63619-2000.01.31-08.30.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thought everyone would like to see this.

Tony K4YYZ

-----Original Message-----
From: Texas Instruments [mailto:ti@dsp2.dspnet.com]
Sent: Saturday, January 29, 2000 4:20 AM
To: Lanier, Robert
Subject: Important TI DSP Announcement

Texas Instruments is introducing major DSP architectural advancements via a
live webcast on Tuesday, February 22 at 12 p.m. EST (5 p.m. GMT).

Pre-register today to be sure you're among the first to get the specifics on
this breakthrough technology. Go to http://www.ti.com/sc/tolfeb22 to see
the Webcast agenda and schedule, download the players to view the Webcast,
and test your browser by reviewing a preview of this Webcast.

You can also enter a drawing* for a chance to win an RCA Lyra(tm) Internet
music player powered by a TI DSP!

The February 22 Webcast will include a high-level overview of these DSP
technology advancements presented by top TI executives followed by detailed
technical presentations by TI's top DSP technologists. Then it's your turn
to ask questions during a live question and answer session.

Don't miss the worldwide on-line debut of this breakthrough DSP technology.
Go to http://www.ti.com/sc/tolfeb22 to register and then mark your calendar
for February 22 at 12 p.m. EST (5 p.m. GMT) and join us for the Webcast.

Thank you,
Texas Instruments

*Drawing rules and regulations can be found on the Web at
http://www.ti.com/sc/tolfeb22
Lyra is a trademark of RCA.
_____
If you feel this e-mail was not relevant, you can change your
e-mail preferences at http://www.techonline.com/list_update.html

---
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55. [dsp] RE: DSP56002EVM availability

From: "Frederick M. Spinner" <fspinner@hotmail.com>
Date: Mon, 31 Jan 2000 17:02:05 GMT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63648-2000.01.31-10.59.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Charles is correct, I have a 56002, and it collects dust..
I play with PSK31, MT63 and SSTV (and if I had a compatible radio--
I'd try Charles' PC-ALE as well..) on a regular basis using the
soundcard.

I am sure Tim doesn't want to hear this, but there is little reason
to continue with DSP EVMs, unless we wish to do wide-bandwidth, high
speed UHF links. Even then the audio A/D's (CODECS) supplied in
most EVMs would be insufficient. It makes sense with the monster
processors we have on our PC's to let them do the DSP. There is
many of those out there, and relatively few DSPs.

I should put a plug in for Linux.. where it is complicated to write
to the audio device in 32-bit Windows (RIFF headers, etc..) it
is simple to do so in Linux (pipe in and out of /dev/audio or /dev/dsp)-- so
development of new modems, etc. could be done quickly,
in C and without worring too much about the conversion to/from
sound.

Fred W0FMS

>From: Charles Brain <chbrain@dircon.co.uk>
>Reply-To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>Subject: [dsp] RE: DSP56002EVM availability
>Date: Mon, 31 Jan 2000 09:48:49 +0000
>
>
>
>Tim Baggett wrote:
> >
> >
> > What is so non-standard and difficult about porting 56002 code to 5630x?
> >
> > Now, I agree porting code from the DSP-93 (TI) to the EVM must have been
> > difficult!
> >
>
>If we could find someway of speeding up development and making it easy to
>port between platforms I feel it would be helpful.
>
>PSK31 has shown that the real consumer demand is for the P.C platform and
>not EVMs unfortunately.
>
>- Charles
>
>
>---
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56. [dsp] RE: DSP56002EVM availability

From: Jake Janovetz <janovetz@tempest.ece.uiuc.edu>
Date: Mon, 31 Jan 2000 11:06:23 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63652-2000.01.31-11.04.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

As much as I shudder at the thought of using PCs as a 'substitute'
for DSPs, I think this is probably the best way to go for this
group. You all have PCs, you all know how to use them, and they
make an intelligent choice for some DSP applications. Add-on
boards for the PC either Firewire, USB, ISA, or PCI that contained
A/Ds or D/As at the bandwidths you'd like would be fairly simple to

design and cost no more than the DSP EVMs.

Then you've got easy-to-program, scalable, portable code that can
crank your algorithms...

   Cheers,
   Jake

On Mon, Jan 31, 2000 at 05:02:05PM +0000, Frederick M. Spinner wrote:
> Charles is correct, I have a 56002, and it collects dust..
> I play with PSK31, MT63 and SSTV (and if I had a compatible radio--
> I'd try Charles' PC-ALE as well..) on a regular basis using the
> soundcard.
>
> I am sure Tim doesn't want to hear this, but there is little reason
> to continue with DSP EVMs, unless we wish to do wide-bandwidth, high
> speed UHF links. Even then the audio A/D's (CODECS) supplied in
> most EVMs would be insufficient. It makes sense with the monster
> processors we have on our PC's to let them do the DSP. There is
> many of those out there, and relatively few DSPs.
>
> I should put a plug in for Linux.. where it is complicated to write
> to the audio device in 32-bit Windows (RIFF headers, etc..) it
> is simple to do so in Linux (pipe in and out of /dev/audio or /dev/dsp)-- so
> development of new modems, etc. could be done quickly,
> in C and without worring too much about the conversion to/from
> sound.
>
> Fred W0FMS
>
>
> >From: Charles Brain <chbrain@dircon.co.uk>
> >Reply-To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> >To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> >Subject: [dsp] RE: DSP56002EVM availability
> >Date: Mon, 31 Jan 2000 09:48:49 +0000
> >
> >
> >
> >Tim Baggett wrote:
> > >
> > >
> > > What is so non-standard and difficult about porting 56002 code to 5630x?
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> > > difficult!
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> >port between platforms I feel it would be helpful.
> >
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> >not EVMs unfortunately.
> >
> >- Charles
> >
> >
> >---
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> >
>
> ____
> Get Your Private, Free Email at http://www.hotmail.com
>
>
> ---
> You are currently subscribed to dsp as: JANOVETZ@UIUC.EDU
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

--
   janovetz@uiuc.edu | How can it be that mathematics, being after all a
 University of Illinois | product of human thought independent of experience,
                        | is so admirably adapted to the objects of reality?
        PP-ASEL | - Albert Einstein

Disclaimer: The policies of this University certainly do not reflect my

own opinions, objectives, or agenda.

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57. [dsp] RE: DSP56002EVM availability

From: Charles Brain <chbrain@dircon.co.uk>
Date: Mon, 31 Jan 2000 21:45:35 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63706-2000.01.31-15.46.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

"Frederick M. Spinner" wrote:
>
> to continue with DSP EVMs, unless we wish to do wide-bandwidth, high
> speed UHF links. Even then the audio A/D's (CODECS) supplied in

Even for that, FPGAs maybe a more suitable technology, at least you
can take advantage of any parallelism in the algorithm.

> I should put a plug in for Linux.. where it is complicated to write

Well you will be pleased to know that I have finally seen the light
and decided to use a Linux machine for development in future.
I find it easier to develop algorithms in C then code them in fixed
point if need be. So I will have fun learning to use the sound system,
at least it won't be as steep as the Windows one was.

- Charles

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58. [dsp] EVM & TAPR enclosure kit for sale

From: "Steve Taft" <KA1WX@MINDSPRING.COM>
Date: Mon, 31 Jan 2000 18:58:0
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63726-2000.01.31-18.55.09--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I've decided to part with my 56002 EVM kit and the TAPR enclosure kit.
It's 95% assembled and includes all original documentation for the EVM.
I'll also throw in a 7V 2A power supply and two 8 pin din connectors. I'd
like to get $150 + shipping(Cashier's Check or Money Order) for the lot.
Please respond via email if you are interested. I'd like to sell this in
the US to minimize complications.

I also have a spare 29C256 memory chip that I will sell for $5 plus
postage
Steve Taft
KA1WX
steve@taft.net or ka1wx@mindspring.com

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59. [dsp] RE: DSP56002EVM availability

From: "Steven R. Bible" <srbible@gate.net>
Date: Mon, 31 Jan 2000 20:30:30 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63736-2000.01.31-19.27.41--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Yes, after you install a flash ROM on the EVM.

- Steve

> -----Original Message-----
> From: bounce-dsp-3222@lists.tapr.org
> [mailto:bounce-dsp-3222@lists.tapr.org]On Behalf Of Herminio Duque
> Lustosa
> Sent: Monday, January 31, 2000 7:31 AM
> To: TAPR DSP Special Interest Group

> Subject: [dsp] RE: DSP56002EVM availability
>
>
>
> Hi,
>
>
> One question about the board DSP56002EVM: Can it run stand
> alone after programmed?
>
>
> Thanks,
>
>
>   Duque
>
> --
> **
>   Herminio Duque Lustosa
>   Departamento de Engenharia Biomédica da Unicamp
>   DEB/CEB-UNICAMP
>   Caixa Postal 6040 - Campinas - SP - CEP: 13083-970
>   Fone: 019 - 7887895/7888245   FAX: 019 - 2893346
>   e-mail: duque@ceb.unicamp.br
> **
>
>
>
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>
>

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60. [dsp] RE: DSP56002EVM availability

From: "Steven R. Bible" <srbible@gate.net>
Date: Mon, 31 Jan 2000 20:30:37 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63737-2000.01.31-19.27.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> Charles is correct, I have a 56002, and it collects dust..
> I play with PSK31, MT63 and SSTV (and if I had a compatible radio--
> I'd try Charles' PC-ALE as well..) on a regular basis using the
> soundcard.

Fred, please put it up for sale. There's lots of folks out there that
would like an EVM to play with.

> I am sure Tim doesn't want to hear this, but there is little reason
> to continue with DSP EVMs, unless we wish to do wide-bandwidth, high
> speed UHF links. Even then the audio A/D's (CODECS) supplied in
> most EVMs would be insufficient. It makes sense with the monster
> processors we have on our PC's to let them do the DSP. There is
> many of those out there, and relatively few DSPs.

It's not a matter of Tim not wanting to hear, it's a matter of the need
for someone or some group of people to do the coding.

The EVM is popular for one reason, a group of hams (the Aluf Null group)
and a single ham (Johan Forrer) wrote and ported the code. Doug Braun
also did a lot of work on the core code.

There is a lot of DSP code for a variety of processors. The typical ham
modems have been coded and are well documented either in the code or in
texts. It is a matter of porting it to Linux, Windows, DOS, or any DSP
processor. Someone needs to come forward and do it.

We've organized the DSP code on the TAPR ftp site by processor. This
was to assist those who wanted to learn DPS programming and port
functions from one processor to another.

The intrepid DSP programmer will get support from the list. All of us
are busy working on that next big project you'll read about or see at

the next DCC. If you are interested in learning DSP, this is a great
opportunity.

- Steve, N7HPR

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61. [dsp] RE: DSP56002EVM availability

From: "Frederick M. Spinner" <fspinner@hotmail.com>
Date: Tue, 01 Feb 2000 04:01:13 GMT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63800-2000.01.31-21.58.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I waited over six months to get the EVM and I invested hours of
time designing and building an interface for the unit (before the TAPR unit
was even an idea), so NO I do NOT plan on selling it. (Yes, I was the very
vocal one in the TAPR group purchase bunch... :( )

The two uses I had/have for it are on the Sats (mainly PSK modem--
I have a couple of other G3RUH modems) and on HF. I moved just
under two years ago, and due to financial constraints and time constraints I
haven't put up any VHF/UHF/Sat antennas and only very rudimentary HF
antennas on my new house, yet. I intend on getting these up this
spring/summer. (Hopefully... :))

What I can say is that I don't use it on HF anymore. The
PSK31 and MT63 code is better implemented in the soundcard versions,
is more convienient, is run on hardware that is widely
available, takes less than six months to acquire, and only gets
better with obsolesence of older technology, while remaining 100%
compatible with it.... Plus, my ham buddy up the road can be
talked into running the new mode with no investment...

I'd get rid of the EVM if there were PSK satellite modems, and some of the
other "experimental" modems, available for Linux. But I suspect at that
time, since all modems would run on PC hardware no one would want to buy the
unit. My understanding is that the Linux
G3RUH modem works well, but I haven't tried it.

My implication in the first message is to agree with Charles and
instead of spending time porting code to the new DSP platforms, and
having them go obsolete in 2-3 years, to port it to the PC..
2-3 years ago the machines weren't up to the task, but they are
now...

I'd suggest that those who NEED the EVMs buy the newer model that
Tim suggested, and do the porting- assuming it is as simple as Tim states...
My original impetus in getting an EVM is that it was cheaper than buying a
PSK1200 hardware modem, so I can empathize.

But, I'd also suggest that new modem development work be done on the PC.
Which is starting to happen. Why? I'd like to see the work
be shared with as many hams as possible, and the DSP EVM route isn't
the way to go if you want to spread "the wealth" universally...

I'd also agree that I'd like to take on a DSP project.. but honestly
it isn't a high priority on my list now. I'm trying to spend my limited
free time designing and optimizing P3D Mode S and Mode L helix antennas, and
beefing up my HF station for April 15th (yes, I'll be a "Slow Code Extra"--
Virtually no HF to all...Maybe the group can beat up on me on this topic
too...). Maybe I'll try to write a PSK400 decoder after 3D is up..it should
be a doable project for a mere DSP beginner such as myself.

I'll let the group know if I make any progress on it...It would be
a good test to see if I actually learned anything getting my BSEE...

73,

Fred Spinner, W0FMS

>From: "Steven R. Bible" <srbible@gate.net>
>Reply-To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

>Subject: [dsp] RE: DSP56002EVM availability
>Date: Mon, 31 Jan 2000 20:30:37 -0500
>
> > Charles is correct, I have a 56002, and it collects dust..
> > I play with PSK31, MT63 and SSTV (and if I had a compatible radio--
> > I'd try Charles' PC-ALE as well..) on a regular basis using the
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>Fred, please put it up for sale. There's lots of folks out there that
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>It's not a matter of Tim not wanting to hear, it's a matter of the need
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>
>The EVM is popular for one reason, a group of hams (the Aluf Null group)
>and a single ham (Johan Forrer) wrote and ported the code. Doug Braun
>also did a lot of work on the core code.
>
>There is a lot of DSP code for a variety of processors. The typical ham
>modems have been coded and are well documented either in the code or in
>texts. It is a matter of porting it to Linux, Windows, DOS, or any DSP
>processor. Someone needs to come forward and do it.
>
>We've organized the DSP code on the TAPR ftp site by processor. This
>was to assist those who wanted to learn DPS programming and port
>functions from one processor to another.
>
>The intrepid DSP programmer will get support from the list. All of us
>are busy working on that next big project you'll read about or see at
>the next DCC. If you are interested in learning DSP, this is a great
>opportunity.
>
>- Steve, N7HPR
>
>
>
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February 2000

Original source file: dsp.0002
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0002

1. [dsp] 56EVM source

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Fri, 4 Feb 2000 14:51:42 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64436-2000.02.04-08.49.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

Looks as if they really are gone. Monterrey Tools took my order 3 weeks
ago, but yesterday I got a very apologetic call saying that the unit was
discontinued, and they had been unable to locate one through another
reseller.

Alan
WA4SCA

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2. [dsp] WTB Motorola 56002EVM kit

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Fri, 4 Feb 2000 17:43:30 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64457-2000.02.04-11.40.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

It looks as if the source has really dried up. If anybody has one gathering
dust and wants to sell it, please let me know. I have a TAPR Interface Kit
with nothing to interface. <grin>

Alan

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: 56EVM source

From: Christian Void <cvoid@netcom.com>
Date: Fri, 4 Feb 2000 09:52:08 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64459-2000.02.04-11.52.43--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Fri, 4 Feb 2000, Alan Biddle wrote:

> Looks as if they really are gone. Monterrey Tools took my order 3 weeks
> ago, but yesterday I got a very apologetic call saying that the unit was
> discontinued, and they had been unable to locate one through another
> reseller.

avnet-marshall has them. i think they have 2 left, as i order one last
week (it arrived monday) and they had 3. it ran me a bit more than
normal, but it is the only source for them i have found. i also attempted
to order from monterey tools.

call them at 1.800.332.8638 and work them on the price, they will go
lower than the initial quoted price.

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

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4. [dsp] Need some help with bios2.asm

From: "Yves Vande Walle" <Yves@vandewalle.net>
Date: Fri, 4 Feb 2000 23:59:20 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64498-2000.02.04-16.57.09--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi all,

As far I understand, it's possible to select between radio port 1 or 2.

I found how to switch the input but not the output and the ptt line and the
DCD led.

Furthermore, at the begining of the asm listing, there is a lot of variables
definning the gain and other various settings of the Codec. It would be nice
if someone could give some more informations about the different values that
can be used or at least how they can be determined.

I have been looking in all the mail archive but haven't find what I am
looking for.

Just two words about the purpose:

the EVM is used for three purposes:

1) SSTV & Fax using JVfax (Excellent Program)
2) 1200bpsk terrestrial packet
3) 9600bpsk terrestrial packet and sat

Unfortunately, I have to modify the output levels to achieve at least 2 Vpp
as this was is needed by my TM-G707.

So I want to dedicate port 2 for that purpose so I can leave my shortwave
gear connected to port 1 for SSTV and Fax.

thanks for the help

Yves

LX3YV/ON1KVX

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: 56EVM source

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Sat, 5 Feb 2000 00:47:45 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64512-2000.02.04-18.45.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Christian,

Thanks for the info. Will give them a call next week. Just for reference,
what did you talk them down to on the price? Their list is $300.

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
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6. [dsp] Re: Need some help with bios2.asm

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Fri, 4 Feb 2000 19:51:06 -0800

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64536-2000.02.04-21.48.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

How do you use the EVM for SSTV?

----- Original Message -----
From: "Yves Vande Walle" <Yves@vandewalle.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Friday, February 04, 2000 2:59 PM
Subject: [dsp] Need some help with bios2.asm

> Hi all,
>
> As far I understand, it's possible to select between radio port 1 or 2.
>
> I found how to switch the input but not the output and the ptt line and
the
> DCD led.
>
> Furthermore, at the begining of the asm listing, there is a lot of
variables
> definning the gain and other various settings of the Codec. It would be
nice
> if someone could give some more informations about the different values
that
> can be used or at least how they can be determined.
>
> I have been looking in all the mail archive but haven't find what I am
> looking for.
>
>
> Just two words about the purpose:
>
> the EVM is used for three purposes:
>
> 1) SSTV & Fax using JVfax (Excellent Program)
> 2) 1200bpsk terrestrial packet
> 3) 9600bpsk terrestrial packet and sat
>
> Unfortunately, I have to modify the output levels to achieve at least 2
Vpp
> as this was is needed by my TM-G707.
>
> So I want to dedicate port 2 for that purpose so I can leave my shortwave
> gear connected to port 1 for SSTV and Fax.
>
>
> thanks for the help
>
>
> Yves
>
> LX3YV/ON1KVX
>
>
> ---
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>
>

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7. [dsp] Newbe advice...

From: Scott Thile <scott.thile@murraystate.edu>
Date: Fri, 04 Feb 2000 21:59:49 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64537-2000.02.04-21.58.09--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi all,

I'm new to the list hear, and new to DSP as well.

I would like to start learning more about DSP and using more of the new DSP

software, and just get involved more in the technology. I have been using
MixWin on PSK and RTTY as well as several of the other PSK programs, all
using the 16 bit or better soundcard approach. I'm really very impressed
with what I've seen so far.

It seems like much of the exciting development (at least the cheep and
accessible stuff that I've been exposed to) is going on in the DSP sound
card arena, and it makes sense to harness the power in these since a lot of
us already own them.

I'm looking for some advice here... I'm taking an electronics skills class
where I need to build a project. I was thinking that this might be a good
time to try to build a DSP developer kit of some kind. I don't really want
to do that if everything is happening in the sound card arena. On the
other hand, I do need to build something, and I want to learn all I can
about DSP technology in the digital modes (HF and VHF/UHF) as well as
filtering and software based instrumentation. I can't really afford the
EVM 56002 kit along with the DSP board. This really looked interesting
though. I'm wondering about building one of the TAPR DSP-93s. Would this
be a usefull way to break into a better understanding of what's happening
here, as well be a good platform for some of the developing technology? Or
is the DSP-93 to old to be cutting edge stuff any more.

Since I need to build the PCBs from scratch anyway, for the class I'm in,
the fact that the DSP-93 kit is no-longer in production is not that big a
deal, as long as I can still get all the components, and maybe one of the
boxes.

What do you think? Would the DSP-93 be a good project for an ambitious
newbe? Any other kits or plans out there woth considering to get my feet wet?

Thanks for your thoughts,
Scott, KU4GR

Scott E. Thile, RPT
Piano - Instrument Technician

Murray State University, Murray, KY
scott.thile@murraystate.edu
http://campus.murraystate.edu/staff/scott.thile/index.html

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8. [dsp] Re: Need some help with bios2.asm

From: "Yves Vande Walle" <yvdw@pt.lu>
Date: Sat, 5 Feb 2000 13:07:03 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64576-2000.02.05-06.03.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>How do you use the EVM for SSTV?

Well, it's easy. and also for amfax and fmfax. it works great. I only used
for reception but should be ok for TX too.

If I remenber well, you can download the asm files on Eduardo Jacobs site:
http://det.bi.ehu.es/~jtpjatae/ham.html

It only works with JVComm (win9x-NT) the follow up of JVFax But it works
great.

Yves

LX3YV/ON1KVX

----- Original Message -----
From: "Yves Vande Walle" <Yves@vandewalle.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Friday, February 04, 2000 2:59 PM
Subject: [dsp] Need some help with bios2.asm

> Hi all,
>
> As far I understand, it's possible to select between radio port 1 or 2.
>

> I found how to switch the input but not the output and the ptt line and
the
> DCD led.
>
> Furthermore, at the begining of the asm listing, there is a lot of
variables
> definning the gain and other various settings of the Codec. It would be
nice
> if someone could give some more informations about the different values
that
> can be used or at least how they can be determined.
>
> I have been looking in all the mail archive but haven't find what I am
> looking for.
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>
> Just two words about the purpose:
>
> the EVM is used for three purposes:
>
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> So I want to dedicate port 2 for that purpose so I can leave my shortwave
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>
> thanks for the help
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>
> Yves
>
> LX3YV/ON1KVX
>
>
> ---
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---
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9. [dsp] Re: Need some help with bios2.asm

From: Douglas Braun <doug.braun@intel.com>
Date: Sat, 05 Feb 2000 21:25:49 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64654-2000.02.05-20.33.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 05:59 PM 2/4/00 , you wrote:
>Hi all,
>
>As far I understand, it's possible to select between radio port 1 or 2.
>
>I found how to switch the input but not the output and the ptt line and the
>DCD led.

Switching the PTT and LEDs from one channel to another is easy. You simply
set a different bit of the I/O port. The modem code on my Website (http://users.rcn.com/dougbert)
has some symbols that can be set or reset to switch from one channel to another.
You could use this as an example for fixing up some other modem program to support
left vs. right channels.

Switching the input and output CODEC channels is trickier. You have to understand

the structure of the CODEC I/O buffer array, and how X and Y addressing is used with
it. Sometimes it is easy to patch a program to switch channels, but other times
there is a lot fo tricky code, and it is hard to patch it without breaking something.

The only in-depth documentation I have seen for this is the stuff written by the
original "Alef Null" group from Finland. I imagine it can be found somewhere on
ftp.tapr.org, but I have no idea where. I have a printout in a binder on my bookshelf. :-)

>Furthermore, at the begining of the asm listing, there is a lot of variables
>definning the gain and other various settings of the Codec. It would be nice
>if someone could give some more informations about the different values that
>can be used or at least how they can be determined.

You can probably figure it out by reading the definition of the CODEC initialization
macros in leonid.asm. It also helps a lot to have the CODEC data sheet, which
hopefully came with your EVM.

>I have been looking in all the mail archive but haven't find what I am
>looking for.

If you learn how to do all this, you will be a member of the elite class of EVM Wizards...

Doug Braun
NA1DB

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10. [dsp] Re: Need some help with bios2.asm

From: Tomi Manninen <tpm@prkele.tky.hut.fi>
Date: Sun, 6 Feb 2000 14:08:14 +0200 (EET)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64708-2000.02.06-06.05.49--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Sat, 5 Feb 2000, Douglas Braun wrote:

> The only in-depth documentation I have seen for this is the stuff
> written by the original "Alef Null" group from Finland. I imagine it
> can be found somewhere on ftp.tapr.org, but I have no idea where. I
> have a printout in a binder on my bookshelf. :-)

It should still be at:

  ftp://wooster.hut.fi/pub/alefnull/

--
Tomi Manninen   Internet: oh2bns@sral.fi
OH2BNS   AX.25:   oh2bns@oh2rbi.fin.eu
KP20ME04   Amprnet: oh2bns@oh2rbi.ampr.org

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11. [dsp] Re: Need some help with bios2.asm

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Sun, 6 Feb 2000 11:04:25 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64764-2000.02.06-13.01.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I found the files but how do you print a postscript form file on a non
postscript printer?

What software etc would I need to do this?

----- Original Message -----
From: "Tomi Manninen" <tpm@prkele.tky.hut.fi>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Sunday, February 06, 2000 4:08 AM
Subject: [dsp] Re: Need some help with bios2.asm

> On Sat, 5 Feb 2000, Douglas Braun wrote:
>

> > The only in-depth documentation I have seen for this is the stuff
> > written by the original "Alef Null" group from Finland. I imagine it
> > can be found somewhere on ftp.tapr.org, but I have no idea where. I
> > have a printout in a binder on my bookshelf. :-)
>
> It should still be at:
>
>   ftp://wooster.hut.fi/pub/alefnull/
>
> --
> Tomi Manninen   Internet: oh2bns@sral.fi
> OH2BNS   AX.25:   oh2bns@oh2rbi.fin.eu
> KP20ME04   Amprnet: oh2bns@oh2rbi.ampr.org
>
>

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12. [dsp] G3RUH/FT736r/EVM Interface problems

From: "Diggs, Steve" <Diggs@daugherty.com>
Date: Sun, 6 Feb 2000 13:11:38 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64766-2000.02.06-13.09.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi all,

I have been working for the last two weeks trying to get the EVM interfaced
to the FT736r such that the G3RUH modems works with a reasonalble BER. I can
now conclude that this interface is FAR from straight-forward, and wonder if
anyone has made this work prior to me.

The current status is that the transmit side is working quite well, but the
recieve side suffers a high bit error rate. (it does work, though) I
followed the instructions from G3RUH as to how to make the recieve side tap.
(Connect at R91 and clip C82). When the EVM is connected, it loads the
detector so much that virtually NO waveform is present on the IN port. I can
adjust the 1K trimpot to max, but it still loads it WAY too much. I have
tried several types of isolation, and a 1MFD capacitor seems to work the
best. (Again, as a hidden suggestion in the G3RUH mod file). The eye pattern
has coherent rails and zero-crossings, but suffers from high frequency noise
that blurs both sine waveforms. With the 1MFD cap in the circuit, the eye
pattern is the same, regardless of whether the EVM is connected or not. That
tells me that the interface in its basic functionality is correct.

While I am still working on a filter to eliminate the high frequency noise,
several questions come to mind. I ask them from the perspective that I AM
NOT one of the "DSP wizards" that Doug recently referred to, but I am very
good at following instructions. I need the real wizards to help us mere
mortals simplify some things:

1. What is the IDEAL signal for the G3RUH modem in the EVM to process, as
stated in volts P-P. Bandwidth would also help me understand.

2. Please state in amplifier terminology what is the effect of the RXGain
and Olevel compile time options. Doug, I appreciate your effort to help
recently, but pointing a mere mortal at the leonid.asm file isn't much help.
Please bring this down a notch in complexity, if possible.

Any help would be greatly appreciated. I promise to summarize all of this
back to the mailing list when I get this setup working, so it can become
part of the documentation available for the EVM

Regards,
Steve Diggs, W4EPI

PS: Suggested improvement for the TAPR buildout kit: add a 1MFD cap in the
recieve circuit, and substitute a 20k trim pot for the 1K presently
supplied. 1K is nowhere NEAR enough isolation.

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13. [dsp] Re: Need some help with bios2.asm

From: "John \"Chris\" Wren" <jcwren@jcwren.com>
Date: Sun, 6 Feb 2000 14:12:59 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64767-2000.02.06-13.10.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have no idea if the Alef Null group would object or not, but what could/should be done is to convert the files from PostScript to PDF. With the advent of all these dang WinPrinters, PostScript is becoming somewhat of a nuisance. If anyone wants to do the checking with Alef Null as far as persmission, I'd be happy to crank the PS files through Adobe...

-- Chris, KD4DTS

----- Original Message -----
From: "PAT McGRATH" <patricio@cyberg8t.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Sunday, February 06, 2000 2:04 PM
Subject: [dsp] Re: Need some help with bios2.asm

> I found the files but how do you print a postscript form file on a non
> postscript printer?
>
> What software etc would I need to do this?
>
> ----- Original Message -----
> From: "Tomi Manninen" <tpm@prkele.tky.hut.fi>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Sunday, February 06, 2000 4:08 AM
> Subject: [dsp] Re: Need some help with bios2.asm
>
>
> > On Sat, 5 Feb 2000, Douglas Braun wrote:
> >
> > > The only in-depth documentation I have seen for this is the stuff
> > > written by the original "Alef Null" group from Finland. I imagine it
> > > can be found somewhere on ftp.tapr.org, but I have no idea where. I
> > > have a printout in a binder on my bookshelf. :-)
> >
> > It should still be at:
> >
> >   ftp://wooster.hut.fi/pub/alefnull/
> >
> > --
> > Tomi Manninen   Internet: oh2bns@sral.fi
> > OH2BNS   AX.25:   oh2bns@oh2rbi.fin.eu
> > KP20ME04   Amprnet: oh2bns@oh2rbi.ampr.org
> >
> >
>
>
>
> ---
> You are currently subscribed to dsp as: jcwren@jcwren.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

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14. [dsp] Re: Need some help with bios2.asm

From: Christian Void <cvoid@netcom.com>
Date: Sun, 6 Feb 2000 11:13:10 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64768-2000.02.06-13.10.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Sun, 6 Feb 2000, PAT McGRATH wrote:

> I found the files but how do you print a postscript form file on a non
> postscript printer?
>
> What software etc would I need to do this?

use gnu ghostscript with the ghostview utility. it will let you view and
print postscript files. you can find it all over the place, but a good
starting place is www.gnu.org or the free software foundation at www.fsf.org.

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

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15. [dsp] Re: Need some help with bios2.asm

From: Christian Void <cvoid@netcom.com>
Date: Sun, 6 Feb 2000 11:34:29 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-64775-2000.02.06-13.32.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Sun, 6 Feb 2000, John "Chris" Wren wrote:

> I have no idea if the Alef Null group would object or not, but what
> could/should be done is to convert the files from PostScript to PDF. With
> the advent of all these dang WinPrinters, PostScript is becoming somewhat of
> a nuisance. If anyone wants to do the checking with Alef Null as far as
> persmission, I'd be happy to crank the PS files through Adobe...

this isn't really the forum for this response, but alas, pdf and
postscript files serve two different purposes. postscript files are
intended to be printed, and perform exceptionally well in regards to
this. pdf files on the otherhand, while relatively easy to print at a
decent quality, are larger, and don't scale nearly as well as postscript
files.

i prefer to have the best of both works. pdf files for online perusal and
postscript files for printing to a postscript printer. :)

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: Need some help with bios2.asm

From: Eduardo Jacob <jtpjatae@bi.ehu.es>
Date: Tue, 08 Feb 2000 11:30:27 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-65005-2000.02.08-04.28.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 14:12 06/02/00 -0500, you wrote:
> I have no idea if the Alef Null group would object or not, but what
>could/should be done is to convert the files from PostScript to PDF. With
>the advent of all these dang WinPrinters, PostScript is becoming somewhat of
>a nuisance. If anyone wants to do the checking with Alef Null as far as
>persmission, I'd be happy to crank the PS files through Adobe...

In any case, if you want, you can get a PS interpreter and Viewer
that can also send postscript files to any printer and is available for
almost any platform. Take a look in http://www.cs.wisc.edu/~ghost/aladdin/
For Windows, you should get Ghostscript and GsView.

Eduardo/EA2BAJ

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17. [dsp] Re: Need some help with bios2.asm

From: "Steven R. Bible" <srbible@gate.net>
Date: Thu, 10 Feb 2000 11:04:26 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-65299-2000.02.10-10.02.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I converted the files many, many moons ago. Take a look on

    http://www.tapr.org/tapr/html/Fdsp4.index.html

You'll find an HTML version (not completed), PDF, and orginal
postscript.

- Steve, N7HPR

> -----Original Message-----
> From: bounce-dsp-3222@lists.tapr.org
> [mailto:bounce-dsp-3222@lists.tapr.org]On Behalf Of John "Chris" Wren
> Sent: Sunday, February 06, 2000 2:13 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] Re: Need some help with bios2.asm
>
>
>   I have no idea if the Alef Null group would object or
> not, but what
> could/should be done is to convert the files from PostScript
> to PDF. With
> the advent of all these dang WinPrinters, PostScript is
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> a nuisance. If anyone wants to do the checking with Alef
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> persmission, I'd be happy to crank the PS files through Adobe...
>
>   -- Chris, KD4DTS
>
> ----- Original Message -----
> From: "PAT McGRATH" <patricio@cyberg8t.com>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Sunday, February 06, 2000 2:04 PM
> Subject: [dsp] Re: Need some help with bios2.asm
>
>
> > I found the files but how do you print a postscript form
> file on a non
> > postscript printer?
> >
> > What software etc would I need to do this?
> >
> > ----- Original Message -----
> > From: "Tomi Manninen" <tpm@prkele.tky.hut.fi>
> > To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> > Sent: Sunday, February 06, 2000 4:08 AM
> > Subject: [dsp] Re: Need some help with bios2.asm
> > >
> > >
> > > > On Sat, 5 Feb 2000, Douglas Braun wrote:
> > > >
> > > > > The only in-depth documentation I have seen for this is
> the stuff
> > > > > written by the original "Alef Null" group from Finland.
> > I imagine it
> > > > > can be found somewhere on ftp.tapr.org, but I have no
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> > > > > have a printout in a binder on my bookshelf. :-)
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> > > > It should still be at:
> > > >
> > > >   ftp://wooster.hut.fi/pub/alefnull/
> > > >
> > > > --
> > > > Tomi Manninen   Internet: oh2bns@sral.fi
> > > > OH2BNS   AX.25:   oh2bns@oh2rbi.fin.eu
> > > > KP20ME04   Amprnet: oh2bns@oh2rbi.ampr.org
> > > >
> > > >
> > >
> > >
> > >

> > ---
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> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
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> >
>
>
> ---
> You are currently subscribed to dsp as: SRBIBLE@GATE.NET
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
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You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] Re: EVM & TAPR enclosure kit for sale

From: "Tim Cunningham" <tim_cunningham@mindspring.com>
Date: Fri, 11 Feb 2000 18:19:06 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-65619-2000.02.12-06.58.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Steve,

I am checking to see if you still have the EVM and kit?

Judging by the posted day I am most likely many days to late.

Thanks,
Tim - N8DEU

-----Original Message-----
From: Steve Taft <KA1WX@MINDSPRING.COM>
To: TAPR DSP Special Interest Group <dsp@lists.tapr.org>
Date: Monday, January 31, 2000 7:00 PM
Subject: [dsp] EVM & TAPR enclosure kit for sale

>I've decided to part with my 56002 EVM kit and the TAPR enclosure kit.
>It's 95% assembled and includes all original documentation for the EVM.
>I'll also throw in a 7V 2A power supply and two 8 pin din connectors. I'd
>like to get $150 + shipping(Cashier's Check or Money Order) for the lot.
>Please respond via email if you are interested. I'd like to sell this in
>the US to minimize complications.
>
>I also have a spare 29C256 memory chip that I will sell for $5 plus
>postage
>Steve Taft
>KA1WX
>steve@taft.net or ka1wx@mindspring.com
>
>---
>You are currently subscribed to dsp as: tim_cunningham@mindspring.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

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19. [dsp] DSP software on Sunsat SO-35

From: "Johann Lochner" <lochner@ing.sun.ac.za>
Date: Sun, 13 Feb 2000 18:12:24 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-65760-2000.02.13-10.10.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi all,

Sunsat is equipped with a high resolution imager capable of filling
the 64 MB ramtray in a matter of seconds. However, because of the

failed 40 Mbit/s S-band downlink, we are forced to download data at
only 9.6 kbit/s. With about 40 minutes of useful download time per
day this is getting extremely boring (not to mention the frustration
for not being able to capture such wonderful images more often).

We are investigating ways to better utilise the NBFM data channels
available on VHF and UHF. The satellite's 40 MHz Motorola DSP56L002
platform has been commissioned at the end of last year. The SNR on
the 8W downlink is extremely favourable (it still has to be measured
for capacity calculations).

The effective data rate could be increased by pre-processing of the
image data and/or by implementing more complex modulator-demodulator
pairs. A simple compression routine running on the DSP already
results in an effective rate of 15k36 bit/s. Because of the high SNR
the 9k6 modems can also be overclocked with limited success (up to a
30% increase in the data rate before ISI becomes a limiting factor).
This option could be pushed a little further by increasing the IF
bandwidth of the receivers.

Any pointers to existing DSP56000 code for compression algorithms
(like JPEG, wavelet and the like!) and/or modems implementing complex
constellations would be most welcome. Also ideas on the suitability
of ITU recommendations for telephony modems (such as V.34). Can
these protocols be used for simplex transmissions? Are there maybe
other ways to increase the data rate?

Regards,
Johann Lochner, ZR1CBC

+---+
  JG Lochner ESL, Universiteit van Stellenbosch
  e-pos: lochner@ing.sun.ac.za
  webtuiste: http://esl.ee.sun.ac.za/~lochner
+---+

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20. [dsp] FW: [amsat-bb] Anyone FT-847 and 56002EVM/RI?

From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Tue, 15 Feb 2000 20:32:29 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-66208-2000.02.15-19.30.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I originally sent this to the amsat-bb list, but someone suggested that I
might want to post it here. If you are one of the lucky ones... I haven't
found anyone running one with an 847, please drop me an email. I don't get
the list in realtime, just the digest.

Thanks in advance,
Alan

-----Original Message-----
From: owner-AMSAT-BB@AMSAT.Org [mailto:owner-AMSAT-BB@AMSAT.Org]On
Behalf Of Alan K. Adamson
Sent: Monday, February 14, 2000 8:48 PM
To: amsat-bb@AMSAT.Org
Subject: [amsat-bb] Anyone FT-847 and 56002EVM/RI?

I'm about ready to start hooking up data related stuff for my sat station.
Before I do, I figured I'd see if anyone is using this setup.

Yaesu 847 and the 56002EVM/RI?

Any hookup related issues, any tricks, etc?

Thanks in advance,
Alan
ne1h@ne1h.dyndns.org

Via the amsat-bb mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe amsat-bb" to Majordomo@amsat.org

---
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21. [dsp] 56002EVM Question - CODEC related

From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Tue, 22 Feb 2000 22:51:01 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67415-2000.02.22-21.49.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Ok, the data sheet suggest that with the preamp off on the input port on the EVM that there should be a signal of .25 - .310 with .28 being nominal.

The question is what internal gain value do you set to max the effect of the ADC? I've heard and read that the internal value needs to be 2.5v. Is that with 23 or all 24 bits.

so for a .25 input would you set the gain to 6db or 10x or would you set it lower?

For those interested, this is with the g3ruh code.

Thanks,
Alan

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22. [dsp] 56002EVM/RI and new "packet enabled" radios

From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Wed, 23 Feb 2000 8:58:11
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67531-2000.02.23-08.56.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

All, As some might know, I've been doing some research on best levels and values for the hookup to a Yaesu 847. This should be directly applicable to other "newer style" radios that have the "standardized" connector for packet.

First let's make sure. On the 847, you get 9600 RX at 10K impedance and 500mv ptp, 1200 RX at 10K impedance and 300mv ptp. On TX it's a common pin and is also 10k impedance and wan't 40mv ptp for 1200 afsk and 2v ptp for 9600.

Ok, here is the problem, I've seen a bunch of people say that they are having problems getting enough V swing to the radios. IF you are using that RI, it's a problem with the 1K ohm 10 turn pot. It's acting like a filter component in an R/C filter to limit the output wave form. I replace it with a 10K and the problem went away. For example in the g3ruh code for a tx rms value of .9, I get 3V of ptp and with the 847, that would give me 4.4khz of dev. As an aside on the 847, they want 2V, I'm assuming because that will give 3Khz dev. As it turns out. It's exactly right. For 2V of drive I get 3.1khz of dev!

Because the radio is really a 10K impedance load on the output of the evm I have since just simply bypassed the 10K (that replaced the 1K 10 turn) and have no problems with output voltage to drive these new style radios.

Your milage may vary, but take a look with a scope. You can back to back the evm and see what you are suppose to have and then play with that resitor or delete it to see if you still have the same problem.

FWIW,
Alan

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23. [dsp] RE: 56002EVM/RI and new "packet enabled" radios

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Wed, 23 Feb 2000 15:25:42 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-67549-2000.02.23-09.24.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alan

One additional factor is that Yaesu seems to have made some running changes
in the rig. Mine (delivered December 1998) has the same specs for input,
but in fact requires 60 mV pp and 3 V pp to achieve 3.0 KHz deviation. I
was sufficiently concerned that I used two deviation meters with the same
results. Others with similar vintage rigs have found the same thing. Yaesu
tech support said essentially that yes, there was a lot of variation in the
units. So far, good results and no smoke.

Another Alan,

WA4SCA

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24. [dsp] TX gain on the fsk1200 source

From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Thu, 24 Feb 2000 9:21:57
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67740-2000.02.24-09.20.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

All, I'm trying to drive the 9600 baud input on the yaesu 847 to do both
9600 and 1200 modes with the evm. I've got the 9600 working just fine and
I get about 2.0v ptp out of the codec that gives 3.0 khz dev on the radio.
The 9600 input wants 2v ptp for 3khz dev. On the fsk1200, the scaling
doesn't work the same and with the TXattenuate set to 0. I only get 1.6v
of drive. That equates to about 2khz of deviation :-(.

Anyone know what changes I might make to get at least 2v of drive. I'd
actually prefer about 2.2 or so to get 3.5khz of dev on the radio.

Thanks in advance.
Alan
ne1h@ne1h.dyndns.org

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25. [dsp] Re: TX gain on the fsk1200 source

From: Douglas Braun <doug.braun@intel.com>
Date: Thu, 24 Feb 2000 13:14:15 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67769-2000.02.24-12.13.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Both of these programs let Leonid set up the CODEC, so I bet the difference in
signal levels is a result of the transmitting generator algorithms of
the modem programs.   They have to be careful to avoid the possibility of
ever overflowing on a signal peak. If you take a signal with a well-defined
amplitude (like a square wave) and pass it through a bandpass filter, there
will usually be signal peaks greater than the original input amplitude, even of
the RMS signal level is the same.

For fsk1200, I bet it would possible to scale up the final output signal level just before
writing it to the CODEC. Look at the code about 9 lines into the subroutine "TxAudioSample".
If your 5600 Assembly Language skills are a little rusty, let me know :-)

Doug
NA1DB

At 04:21 AM 2/24/00 , you wrote:
>All, I'm trying to drive the 9600 baud input on the yaesu 847 to do both
>9600 and 1200 modes with the evm. I've got the 9600 working just fine and
>I get about 2.0v ptp out of the codec that gives 3.0 khz dev on the radio.
>The 9600 input wants 2v ptp for 3khz dev. On the fsk1200, the scaling
>doesn't work the same and with the TXattenuate set to 0. I only get 1.6v
>of drive. That equates to about 2khz of deviation :-(.
>
>Anyone know what changes I might make to get at least 2v of drive. I'd
>actually prefer about 2.2 or so to get 3.5khz of dev on the radio.

>
>Thanks in advance.
>Alan
>ne1h@ne1h.dyndns.org
>
>---
>You are currently subscribed to dsp as: doug.braun@intel.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] Re: 56002 code

From: Douglas Braun <doug.braun@intel.com>
Date: Thu, 24 Feb 2000 14:53:46 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67776-2000.02.24-13.52.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 02:20 PM 2/24/00 , you wrote:
>Doug,
>
>Thanks for the prelim help. My skills are non-existant.
>
>I can only tell you what I see on a scope.
>
>On Pin 34 of the Codec with the g3ruh, I can get a voltage of up to 3.0V in
>return I get 4.4khz dev... Way too much, but plenty of headroom.   In the
>g3ruh stuff, there is a variable called OLevel that is used "in code" to
>scale the output I think.

What I was suggesting is basically the same as the Olevel, except that
it needs a value greater than 1.0 instead of less than 1.0. Since the
56002 works with fractional math, you would have to first scale with
a number less then 1.0, and then double the result by shifting. BTW,
the code in g3ruh is a lot tricker than fsk1200...

>On the 1200fsk code, It doesn't follow the same mechanism. It uses a
>TXattenuate variable that you can't set to anything but a positive value and
>with it set to 0. I only see 1.6V of output on that same pin.

The g3ruh modem has the TxAttenuate hard-coded at 0.

>I'm a pretty quick learn, but if you wouldn't mind, I'm betting you can tell
>me exactly what I need pretty quickly.

It turns out to be even easier than I thought! Look for the label "TxAudioSample".
Go down 8 lines (line 669 in my version). Comment out the line "asr a". This
is doing a divide-by-2 of the output signal, as a safety measure to prevent any possibility
of overflow. Afterwards, your output signal will be twice as high, but there is
some possibility of overload. You should easily be able to hear it if it occurs;
listen for crackly sounds on the output.

Doug
NA1DB

>Thanks and if you'd please copy ALL on the reply so I get this message at
>home.
>
>Alan
>NE1H - transplanted to GA.... I guess you'd say portable 4!

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27. [dsp] RE: 56002 code

From: Douglas Braun <doug.braun@intel.com>
Date: Thu, 24 Feb 2000 15:35:36 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67781-2000.02.24-14.34.01--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 02:57 PM 2/24/00 , you wrote:
>Ah, will that trick work in the psk stuff too? I didn't look there yet?
>

>Alan

psk.asm has its own "fudge factor" variable. Look at the definition of "TxSymbAmpl".
It is now 0.25, and you can set it as high as 0.66 without any obvious overflow
problems.

Doug
N1OWU

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28. [dsp] FS: Satellite station including Motorola 56002 EVM board

From: John Melton - Sun UK - ENS <John.Melton@UK.Sun.COM>
Date: Fri, 25 Feb 2000 15:43:09 +0000 (GMT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67967-2000.02.25-09.41.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

I have my satellite station for sale and as it includes a Motorola 56002 EVM
board I thought I would put it on this list.

All the equipment is located in Southern England near Gatwick Airport.

The EVM board is still available (includes the eeprom) and I am open to any
reasonable offer. I can ship anywhere at your cost!

If anyone is interested, or wants the list send me an email directly - not back
to this list.

-- John Melton n6lyt/g0orx

                Principal Systems Software Engineer
        ((Sun Microsystems,
      (|~~| Flour Daniel Centre East, Riverside Way
       `--'   Camberley, Surrey GU15 3YL England
       JAVA   Phone: +44 1276 416297 (internal ext 16297)
                Email: john.melton@uk.sun.com

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

29. [dsp] TNC firmware for DSP93

From: "Julio Manuel" <py4lf@amsat.org>
Date: Sat, 26 Feb 2000 16:24:54 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: "PacComm Packet Radio Systems" <sales@paccomm.com>
Message-ID: <LYR3532-68138-2000.02.26-12.23.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Anybody can tell me wich is the last release for Paccomm TNC for the DSP93 ? I´m using the release
3.3.9.3 from Feb 11, 1996.
Best regards from
Julio
PY4LF

30. [dsp] 56002 EVM wanted

From: "Marius Hauki" <Marius.Hauki@datarespons.no>
Date: Tue, 29 Feb 2000 10:25:30 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-68547-2000.02.29-03.26.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am interested in buying a 56002 EVM for an amateur radio project.
Please contact me if you have one for sale.

73 de LA9EEA
Marius Hauki

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March 2000

Original source file: dsp.0003
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0003

1. [dsp] RE: dsp digest: February 29, 2000

```
From: "Jabi Aguirre" <govier02@sarenet.es>
Date: Wed, 1 Mar 2000 07:48:31 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-68700-2000.03.01-00.47.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

```
Dear Marius
I have one second hand DSP56002EVM assembled in metalic case. With 2 CDRom,s
(one from Motorola, other with all software for DSP56002EVM and
hamradio in general).
Price around $300 US.
Salu2, de Jabi, EA2ARU.
[Attachment: Evmmet.jpg; image/jpeg; 55,852 bytes]
```

---

2. [dsp] RE: DSP56002EVM

```
From: "Tom Scott" <tscott@eni.net>
Date: Tue, 29 Feb 2000 23:44:48 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-68712-2000.03.01-01.52.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

```
Murray,

I'm behind on the DSP list and just noticed your message.

If you are still having trouble I may be able to help. Hopefully your
problem has been resolved by now, but in the event it hasn't, if you will
tell me which office you are working with and even perhaps the person that
you've spoken with, I will find out what the problem is and 'splain it to
someone if necessary...

Please accept my humblest apologies for the difficulty. Even if you have
gotten the problem straightened out, I'd like to get more details from you
so I can make sure things like this don't happen to our customers. Sometimes
our folks get so caught up in the big dollar deals (our bread and butter),
that they forget to treat people with little orders decently. Its not our
policy, but I guess its human nature.

73

- Tom
- Technical Marketing Manager - Wyle Electronics
_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/
  ?Tom Scott     -     Wyle Electronics     -     KD7DMH
     10300 SW Nimbus Ave #PB, Portland, OR 97223
       503-603-1931 - Tel                503-684-6620 - Fax
                            503-703-2032 - Cell
_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/_/


-----Original Message-----
From:   bounce-dsp-8821@lists.tapr.org [mailto:bounce-dsp-8821@lists.tapr.org]
On Behalf Of Murray Scott
Sent:   Monday, January 17, 2000 2:05 PM
To:     TAPR DSP Special Interest Group
Subject:        [dsp] DSP56002EVM

I am having trouble getting a DSP56002EVM from WYLE. They charged my
Visa  card at the beginning of December but have not delivered.  Phone
calls acknowledge the order but no information or product comes forth.
But of course TAPR came through and I have their kit to put the
DSP56002EVM into if I ever get it.


---
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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org



---
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```

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3. [dsp] determining baud rate?

From: Christian Void <cvoid@netcom.com>
Date: Thu, 2 Mar 2000 16:21:37 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-68930-2000.03.02-18.20.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

so, i've looked around and can't seem to find any source code or examples
of just how to go about writing some baud rate detection/determination
code. anyone have any pointers?

thanks in advance.

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

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4. [dsp] suggest

From: "Bui Trong Tu" <bttu@phys.hcmuns.edu.vn>
Date: Mon, 6 Mar 2000 11:55:35
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-69482-2000.03.06-11.54.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

My project need a 8 bit DPS chip. Could you suggest me one?
Thank you.

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: suggest

From: Jake Janovetz <janovetz@tempest.ece.uiuc.edu>
Date: Mon, 6 Mar 2000 12:49:01 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-69492-2000.03.06-12.52.09--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

No one makes an 8-bit DSP chip. TI makes 16-bit and 32-bit.
Analog Devices makes 16-bit, and Motorola makes 16, 24, and 32-bit
processors. Without further information, I would suggest the
Motorola or Analog Devices only because their learning curve is
shorter and their architecture is much more robust, usable, and
mature. The TI architectures are more difficult to learn, obfuscated,
and poorly suited to the task of DSP. (but they were first, and
have a larger market share -- go figure)

    Cheers,
    Jake

On Mon, Mar 06, 2000 at 11:55:35AM +0000, Bui Trong Tu wrote:
> My project need a 8 bit DPS chip. Could you suggest me one?
> Thank you.
>
> ---
> You are currently subscribed to dsp as: JANOVETZ@UIUC.EDU
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

--
   janovetz@uiuc.edu | How can it be that mathematics, being after all a
 University of Illinois | product of human thought independent of experience,
                        | is so admirably adapted to the objects of reality?
        PP-ASEL | - Albert Einstein

Disclaimer: The policies of this University certainly do not reflect my
            own opinions, objectives, or agenda.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: suggest

From: Hamish Moffatt <hamish@rising.com.au>
Date: Tue, 7 Mar 2000 07:47:01 +1100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-69507-2000.03.06-14.45.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Mon, Mar 06, 2000 at 12:49:01PM -0600, Jake Janovetz wrote:
> mature. The TI architectures are more difficult to learn, obfuscated,
> and poorly suited to the task of DSP. (but they were first, and
> have a larger market share -- go figure)

Can you elaborate on what makes them poorly suited to DSP?

thanks,
Hamish VK3SB

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7. [dsp] Data representation in G3RUH modem

From: "Johann Lochner" <lochner@ing.sun.ac.za>
Date: Fri, 10 Mar 2000 17:50:55 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-70262-2000.03.10-09.50.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi folks,

If I'm not mistaken, the PAM waveform in the discrete implementation
of the G3RUH modem is NRZ-L (level) coded. In the DSP version, from
Doug's site, NRZ-S (inversion, space) coding is used. However, I've
used both versions for demodulating Pacsat downlinks. Am I missing
something?

While I'm at it: any suggestions for (or pointers to) clock recovery
algorithms for multi-level PAM? Should another scrambler polynomial
be considered for obtaining zero crossings in multi-level PAM? Does
NRZ-I (inversion) coding have advantages over NRZ-L?

Regards,
Johann

+---+
  JG Lochner ESL, Universiteit van Stellenbosch
  e-pos: lochner@ing.sun.ac.za
  webtuiste: http://esl.ee.sun.ac.za/~lochner
+---+

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] New to DSP

From: "Christopher R. Hoffman" <choffman@hrb.de>
Date: Sat, 11 Mar 2000 07:34:31 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-70377-2000.03.11-00.35.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I would like to learn the in-and-outs of DSP programing and hardware. I
am aiming towards practical experience in professional controller
design, coding, and application engineering. I have some questions:

- I realize that I am somewhat late in the game to take advantage of the
56002EVM. Is there an EVM on the market that could replace it (i.e.
accept the same firmware)? Would it be compatible with the TAPR EVM
interface? Would I instead have to purchase a 56002EVM used?

- To get started with experimentation in algorithms: I am already
schooled in general calculus, with adv. calc, dif-eq, and stats to knock
out. Do I need to wait for completion of these courses before I dig into

filter math? Where should I start gnawing on that rawhide?

- To get started with firmware and controller coding (sp?) (I still have
to take Assembly language classes, but I am a quick study): where can I
go to get a leg up?

My Background:
- Finishing 5 years as active duty military communications tech.
- Taking/finished core classes towards EL/EE/CompE.
- Working on admission to engineering schools/colleges at: UofWa, Cal
Poly SLO, Cal Berkeley, Cal Tech, etc... (suggestions welcome)
- I have basic RF/EL knowledge (i.e.: Basic RF repair, Ham
certification, kit style experimentation, book smarts...)

Thank you for your help, in advance.
-Chris Hoffman
DA1CH/AEM1CH/KO6GA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: New to DSP

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sat, 11 Mar 2000 02:06:03 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-70386-2000.03.11-01.05.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

If you can get you hands on an EVM (along with all the CPU, system, and software
tools documentation), you will have an excellent learning resource!

Doug
NA1DB

P.S.: My EVM software is now located at: http://members.bellatlantic.net/~dougnad

At 07:34 AM 3/11/00 +0000, you wrote:
>I would like to learn the in-and-outs of DSP programing and hardware. I
>am aiming towards practical experience in professional controller
>design, coding, and application engineering. I have some questions:
>
>- I realize that I am somewhat late in the game to take advantage of the
>56002EVM. Is there an EVM on the market that could replace it (i.e.
>accept the same firmware)? Would it be compatible with the TAPR EVM
>interface? Would I instead have to purchase a 56002EVM used?
>
>- To get started with experimentation in algorithms: I am already
>schooled in general calculus, with adv. calc, dif-eq, and stats to knock
>out. Do I need to wait for completion of these courses before I dig into
>filter math? Where should I start gnawing on that rawhide?
>
>- To get started with firmware and controller coding (sp?) (I still have
>to take Assembly language classes, but I am a quick study): where can I
>go to get a leg up?
>
>
>My Background:
>- Finishing 5 years as active duty military communications tech.
>- Taking/finished core classes towards EL/EE/CompE.
>- Working on admission to engineering schools/colleges at: UofWa, Cal
>Poly SLO, Cal Berkeley, Cal Tech, etc... (suggestions welcome)
>- I have basic RF/EL knowledge (i.e.: Basic RF repair, Ham
>certification, kit style experimentation, book smarts...)
>
>Thank you for your help, in advance.
>-Chris Hoffman
>DA1CH/AEM1CH/KO6GA
>
>
>
>
>

>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] DSP56307EVM

From: Murray Scott <ke8um@flash.net>
Date: Sat, 11 Mar 2000 16:19:11 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-70504-2000.03.11-15.20.40--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I ordered the DSP56002EVM and the TAPR interface kit. Well I received
the TAPR kit okay. The DSP56002 seems to be a thing of the past so I
have been offered a DSP56307EVM in it's place. Does anyone have
experience porting some of the code for the 56002 to the 56307? The
56307 looks like it will be faster. Has anyone installed the 56307 in
the TAPR kit?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: DSP56307EVM

From: "Johann Lochner" <lochner@ing.sun.ac.za>
Date: Sun, 12 Mar 2000 17:01:35 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-70628-2000.03.12-09.01.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Murray,

>   I ordered the DSP56002EVM and the TAPR interface kit. Well I
> received the TAPR kit okay. The DSP56002 seems to be a thing of the
> past so I have been offered a DSP56307EVM in it's place. Does
> anyone have experience porting some of the code for the 56002 to
> the 56307? The 56307 looks like it will be faster. Has anyone
> installed the 56307 in the TAPR kit?

An application note, Software differences between the DSP56002 and
the DSP56303, is available from Motorola's website. I have no
experience with the 56300 series, but I guess it could be helpful:
<http://www.mot.com/pub/SPS/DSP/LIBRARY/APPNOTES/AN1829.pdf>.

Regards,
Johann

+---+
  JG Lochner ESL, Universiteit van Stellenbosch
  e-pos: lochner@ing.sun.ac.za
  webtuiste: http://esl.ee.sun.ac.za/~lochner
+---+

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] A chuckle

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Fri, 17 Mar 2000 22:38:59 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71797-2000.03.17-21.41.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Go check out: http://patent.womplex.ibm.com/details?&pn=US06025810__

Maybe this has already made the rounds of the ham radio newsgroups and mailing
lists. Sorry if I am annoying people who are tired of seeing it...

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] VERY INTERESTING QAM ASIC!!!

From: Robert McGwier <rwmcgwier@home.com>
Date: Sat, 18 Mar 2000 09:33:01 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71869-2000.03.18-08.32.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have no financial interest in Broadcom (except maybe in my mutual funds,
managed by others).

Looking for a cheap transceiver to do (say) 10 Mbps on the air? My company
is in the process of buying 100 and paying $80 a piece, so I suspect we could
get them for under $200 a piece. At this price, I can (and will) experiment
with these on my own. What are they?

http://www.broadcom.com

Part number: BCM6020 "DSL" transceiver (baloney, it is a full QAM
transceiver/packetizer, FEC encoder/decoder. The block diagram has
me almost having an tech-gasm.

The DSL and Cablemodem industry and digital TV industries are
revolutionizing megabit rates QAM transceivers.

Bob

Click here for Free Video!!
http://www.gohip.com/freevideo/

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] Re: A chuckle

From: Robert McGwier <rwmcgwier@home.com>
Date: Sat, 18 Mar 2000 09:54:57 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71877-2000.03.18-08.54.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Maybe we should blow the patent office away and start over?

At 10:38 PM 03/17/2000 Friday , you wrote:
>Go check out: http://patent.womplex.ibm.com/details?&pn=US06025810__
>
>Maybe this has already made the rounds of the ham radio newsgroups and mailing
>lists. Sorry if I am annoying people who are tired of seeing it...
>
>Doug
>NA1DB
>
>
>---
>You are currently subscribed to dsp as: RWMCGWIER@HOME.COM
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

----
Click here for Free Video!!
http://www.gohip.com/freevideo/

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] Re: A chuckle

From: Christian Void <cvoid@netcom.com>
Date: Mon, 20 Mar 2000 12:39:45 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-72429-2000.03.20-14.39.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Fri, 17 Mar 2000, Douglas Braun & Nadia Papakonstantinou wrote:

> Go check out: http://patent.womplex.ibm.com/details?&pn=US06025810__
>
> Maybe this has already made the rounds of the ham radio newsgroups and mailing
> lists. Sorry if I am annoying people who are tired of seeing it...

i think this actually made slashdot. sounds like an antenna to me. :)

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] DSP56002EVM G3RUH modem at 38.4k?

From: "Bob Carlson, n0aot" <n0aot@san.rr.com>
Date: Thu, 30 Mar 2000 15:25:33 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74503-2000.03.30-17.33.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi All--

Anybody get a 38.4k baud EVM version of the G3RUH modem running yet?

I'm getting ready to mod my FT-847 for 38.4k pacsat operation soon and will
need the faster modem too. I'm really happy with the way the EVM works at
1200 and 9600 baud. Am assuming/hoping the EVM will work at 38.4k ...

--Bob, n0aot@san.rr.com

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: Christian Void <cvoid@netcom.com>
Date: Thu, 30 Mar 2000 15:49:21 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74508-2000.03.30-17.49.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Thu, 30 Mar 2000, Bob Carlson, n0aot wrote:

> Anybody get a 38.4k baud EVM version of the G3RUH modem running yet?
>
> I'm getting ready to mod my FT-847 for 38.4k pacsat operation soon and will
> need the faster modem too. I'm really happy with the way the EVM works at
> 1200 and 9600 baud. Am assuming/hoping the EVM will work at 38.4k ...

just read an article talking about 38.4k wxsat images and the evm "just
barely" being able to handle 38.4k. can't remember if it was in
monitoring times or the british magazine 'shortwave' or not. i do,
however, remember it being based on the g3ruh modem. your mileage may
vary. i'll go look it up when i get home.

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

You are currently subscribed to dsp as: lyris.dsp@tapr.org

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Thu, 30 Mar 2000 16:01:49 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74513-2000.03.30-18.01.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

If you have it working please share what you did.

I am very interested.

----- Original Message -----
From: "Bob Carlson, n0aot" <n0aot@san.rr.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, March 30, 2000 3:25 PM
Subject: [dsp] DSP56002EVM G3RUH modem at 38.4k?

> Hi All--
>
> Anybody get a 38.4k baud EVM version of the G3RUH modem running yet?
>
> I'm getting ready to mod my FT-847 for 38.4k pacsat operation soon and
will
> need the faster modem too. I'm really happy with the way the EVM works at
> 1200 and 9600 baud. Am assuming/hoping the EVM will work at 38.4k ...
>
> --Bob, n0aot@san.rr.com
>
>
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] RE: DSP56002EVM G3RUH modem at 38.4k?

From: "Myszka, Mike" <mmyszka@hiwaay.net>
Date: Thu, 30 Mar 2000 20:35:24 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74527-2000.03.30-20.35.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Does anyone have of a source where I can purchase the DSP56002EVM?
Preferably in the US, but any place will do just fine.

Thanks,
Mike

-----Original Message-----
From: bounce-dsp-15875@lists.tapr.org
[mailto:bounce-dsp-15875@lists.tapr.org]On Behalf Of Bob Carlson, n0aot
Sent: Thursday, March 30, 2000 3:26 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] DSP56002EVM G3RUH modem at 38.4k?

Hi All--

Anybody get a 38.4k baud EVM version of the G3RUH modem running yet?

I'm getting ready to mod my FT-847 for 38.4k pacsat operation soon and will
need the faster modem too. I'm really happy with the way the EVM works at
1200 and 9600 baud. Am assuming/hoping the EVM will work at 38.4k ...

--Bob, n0aot@san.rr.com

You are currently subscribed to dsp as: mmyszka@hiwaay.net

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] RE: DSP56002EVM G3RUH modem at 38.4k?

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Thu, 30 Mar 2000 21:05:49 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74547-2000.03.30-23.04.59--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Ckeck this EasyDSP website perhaps you could use same.

http://ourworld.compuserve.com/homepages/df6jb/

----- Original Message -----
From: "Myszka, Mike" <mmyszka@hiwaay.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, March 30, 2000 8:35 PM
Subject: [dsp] RE: DSP56002EVM G3RUH modem at 38.4k?

> Does anyone have of a source where I can purchase the DSP56002EVM?
> Preferably in the US, but any place will do just fine.
>
> Thanks,
> Mike
>
> -----Original Message-----
> From: bounce-dsp-15875@lists.tapr.org
> [mailto:bounce-dsp-15875@lists.tapr.org]On Behalf Of Bob Carlson, n0aot
> Sent: Thursday, March 30, 2000 3:26 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] DSP56002EVM G3RUH modem at 38.4k?
>
>
> Hi All--
>
> Anybody get a 38.4k baud EVM version of the G3RUH modem running yet?
>
> I'm getting ready to mod my FT-847 for 38.4k pacsat operation soon and
will
> need the faster modem too. I'm really happy with the way the EVM works at
> 1200 and 9600 baud. Am assuming/hoping the EVM will work at 38.4k ...
>
> --Bob, n0aot@san.rr.com
>
>
>
> ---
> You are currently subscribed to dsp as: mmyszka@hiwaay.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] RE: DSP56002EVM G3RUH modem at 38.4k?

From: Charles H Brain <chbrain@dircon.co.uk>
Date: Fri, 31 Mar 2000 07:15:40 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74563-2000.03.31-00.13.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

"Myszka, Mike" wrote:
>
> Does anyone have of a source where I can purchase the DSP56002EVM?
> Preferably in the US, but any place will do just fine.
>
> Thanks,
> Mike
>

I am afraid Motorola no longer makes them, but you may be able to get
one second hand.

- Charles

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

22. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: John Melton <John.Melton@uk.sun.com>
Date: Fri, 31 Mar 2000 07:23:56 +0100 (BST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74564-2000.03.31-00.22.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> From: "Bob Carlson, n0aot" <n0aot@san.rr.com>
>
> Hi All--
>
> Anybody get a 38.4k baud EVM version of the G3RUH modem running yet?
>
> I'm getting ready to mod my FT-847 for 38.4k pacsat operation soon and will
> need the faster modem too. I'm really happy with the way the EVM works at
> 1200 and 9600 baud. Am assuming/hoping the EVM will work at 38.4k ...
>
> --Bob, n0aot@san.rr.com

The 38k4 modem for the EVM was being archived at:

ftp://bips.bi.ehu.es/pub/g38kruh/

I just had a look in there, and there appears to be no files in that directory!

I may still have a copy if you cannot find it.

My experience was that it did not work 100%, so I eventaully bought a modem
from GMSK Data Products that is based on the FX589 GMSK Modem chip. This modem
will plug into a TNC-2 modem disconnect header. Beware that the TNC-2 needs to
be able to run the RS232 connection to the computer at a speed greater than
38k4. I ran the modem using a MAX232 to convert the signal levels to RS-232
directly into a serial port on a Sun workstation, so have never tried it with a
TNC.

-- John Melton n6lyt/g0orx

                Principal Systems Software Engineer
        ((Sun Microsystems,
      (|~~| Flour Daniel Centre East, Riverside Way
       `--'   Camberley, Surrey GU15 3YL England
       JAVA   Phone: +44 1276 416297 (internal ext 16297)
                Email: john.melton@uk.sun.com

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] RE: dsp digest: March 30, 2000

From: "Jabi Aguirre" <govier02@sarenet.es>
Date: Fri, 31 Mar 2000 08:30:37 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74568-2000.03.31-00.30.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Dear all:
I adjunt beta soft for 38.4 Kbds and others also.
Regards de Jabi, EA2ARU.

[Attachment: g38k017.arj; application/octet-stream; 113,895 bytes]

24. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: John Melton <John.Melton@uk.sun.com>
Date: Fri, 31 Mar 2000 07:59:42 +0100 (BST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74574-2000.03.31-00.58.40--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>
> The 38k4 modem for the EVM was being archived at:
>
> ftp://bips.bi.ehu.es/pub/g38kruh/
>
> I just had a look in there, and there appears to be no files in that
directory!
>

looks like they have the option to show files turned off, but if you put the
full path in it gets it ok, so use:

ftp://bips.bi.ehu.es/pub/g38kruh/g38k017.arj

-- John Melton n6lyt/g0orx

                Principal Systems Software Engineer
        ((Sun Microsystems,
      (|~~| Flour Daniel Centre East, Riverside Way
       `--'   Camberley, Surrey GU15 3YL England
       JAVA   Phone: +44 1276 416297 (internal ext 16297)
                Email: john.melton@uk.sun.com

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: Itziar Martinez <itziar@bips00.bi.ehu.es>
Date: Fri, 31 Mar 2000 17:12:19 +0200 (CET)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74613-2000.03.31-09.14.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi All--
        I am a member of the team that developed the 38k4 modem for the
EVM that can be found at:

 ftp://bips.bi.ehu.es/pub/g38kruh/

We know that it does not work 100%, so we are working on fixing it. We
will let you know when we complete all the changes.

We are also working on porting it to the analog devices SHARC.

Itziar

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Fri, 31 Mar 2000 08:12:39 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74627-2000.03.31-10.12.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

What can this software be tested with?

Will it install in the Flash memory?

----- Original Message -----
From: "Itziar Martinez" <itziar@bips00.bi.ehu.es>

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Friday, March 31, 2000 7:12 AM
Subject: [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

> Hi All--
> I am a member of the team that developed the 38k4 modem for the
> EVM that can be found at:
>
> ftp://bips.bi.ehu.es/pub/g38kruh/
>
> We know that it does not work 100%, so we are working on fixing it. We
> will let you know when we complete all the changes.
>
> We are also working on porting it to the analog devices SHARC.
>
> Itziar
>
>
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

27. [dsp] client software

From: Christian Void <cvoid@netcom.com>
Date: Fri, 31 Mar 2000 09:20:39 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74643-2000.03.31-11.20.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

i have been playing around with some of the dsp apps and am curious as to
what the dsp expects to be on the client end of the serial port for most
applications? for modems, i am assuming a simple terminal (aside from
kiss modems), but what about things like the apt modems and such? jvfax?

thanks in advance.

---
christian void <cvoid@netcom.com>
http://www.morphine.com/void/
pgp key available via finger

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

28. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: Itziar Martinez <itziar@bips00.bi.ehu.es>
Date: Fri, 31 Mar 2000 19:25:51 +0200 (CET)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74646-2000.03.31-11.26.57--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Fri, 31 Mar 2000, PAT McGRATH wrote:

> What can this software be tested with?
It can not be easily tested, that is the reason why we have ported it to
the SHARC. We are testing the algorithms on the SHARC and then we will fix
the code for the EVM.

Itziar

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

29. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: Jerry Ross <dittybop@pacbell.net>
Date: Fri, 31 Mar 2000 19:09:58 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-74746-2000.03.31-21.11.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I just downloaded the below referenced code. Turned out to be less than
intuitive. I am using Windows 2000 and Netscape. Netscape could get me to the
site but I could not see any files.
I then used the W2K ftp. It got me to the site but I still could not see the
files - using the DIR command. Switching to the ls command solved the problem.
GET worked just fine.

PAT McGRATH wrote:

> What can this software be tested with?
>
> Will it install in the Flash memory?
>
> ----- Original Message -----
> From: "Itziar Martinez" <itziar@bips00.bi.ehu.es>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Friday, March 31, 2000 7:12 AM
> Subject: [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?
>
> > Hi All--
> > I am a member of the team that developed the 38k4 modem for the
> > EVM that can be found at:
> >
> > ftp://bips.bi.ehu.es/pub/g38kruh/
> >
> > We know that it does not work 100%, so we are working on fixing it. We
> > will let you know when we complete all the changes.
> >
> > We are also working on porting it to the analog devices SHARC.
> >
> > Itziar
> >
> >
> >
> > ---
> > You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >
>
> ---
> You are currently subscribed to dsp as: dittybop@pacbell.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

April 2000

Original source file: dsp.0004
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0004

1. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: Thomas Sailer <sailer@ife.ee.ethz.ch>
Date: Mon, 03 Apr 2000 09:56:55 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-75128-2000.04.03-02.57.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Itziar Martinez wrote:

> We know that it does not work 100%, so we are working on fixing it. We
> will let you know when we complete all the changes.

This seems tough, as a G3RUH signal has around 50% excess bandwidth,
thus having a bandwidth of roughly 28kHz, while the A/D converter
as far as I know only has about 22kHz bandwidth (0.45*48kHz).

Tom

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k?

From: Thomas Sailer <sailer@ife.ee.ethz.ch>
Date: Mon, 03 Apr 2000 14:53:20 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@lists.tapr.org, itziar@bips00.bi.ehu.es, edu@tass.kender.es, "Inma Hernáez " <inma@bips00.bi.ehu.es>
Message-ID: <LYR3532-75165-2000.04.03-07.53.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Borja Etxebarria wrote:

> I don't know where you get 28kHz from.

Roll off factor 0.5

> All the technical problems we are having are located in the syncronization
> and DCD algorithm (you see, nothing to do with bandwidths or modulations).

Of course does this have a lot to do with the excess bandwidth!!
The less excess bandwidth you have, the more difficulty you get with
the carrier detect algorithm.

Tom

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: DSP56002EVM G3RUH modem at 38.4k? (fwd)

From: Itziar Martinez <itziar@bips00.bi.ehu.es>
Date: Mon, 3 Apr 2000 18:41:31 +0200 (CET)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-75219-2000.04.03-11.43.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thomas Sailer wrote:

>Itziar Martinez wrote:
>> We know that it does not work 100%, so we are working on fixing it. We
>> will let you know when we complete all the changes.

>This seems tough, as a G3RUH signal has around 50% excess bandwidth,
>thus having a bandwidth of roughly 28kHz, while the A/D converter
>as far as I know only has about 22kHz bandwidth (0.45*48kHz).
>Tom

The 9.6 kbps G3RUH modem uses a baseband bandwidth of 6.2kHz aproximately.

6.2kHz = (9600*(1+0.3))*.5 (raised cosine filter rolloff factor=0.3)

I don't know where you get 28kHz from.

For the 38k4, multiplying everything x4, we get 24960 Hz, which is only a
bit out of the limit! Instead of using 0.3 rolloff, we are using 0.2, this
narrows a little the bandwith of the signal. The drawback is a slight BER
performance degradation when working against a hardware modem using 0.3
rolloff. No penalty working agains a peer modem.

Actually this part of the modem IS working pretty fine at 38k4 bps. The
measured PSD obtained in a signal analyzer (baseband spectrum analyzer)
matches precisely the theorical values (God saves DSP!).

All the technical problems we are having are located in the syncronization
and DCD algorithm (you see, nothing to do with bandwidths or modulations).
We are rewritting it completely, as the current one does not scale smoothly
from 9k6 to 38k, and 0.3-->0.2 rolloff change (it uses some hand-tuned
thresholds that only work fine for 9k6).

regards.

Borja Etxebarria

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] DL32 with settable baudrate

From: Fernando Mederos <fmederos@adinet.com.uy>
Date: Fri, 07 Apr 2000 22:42:17 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76063-2000.04.07-20.45.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,
	I've added a 'b' argument to DL32 command-line to add the capability of
selecting the desired baudrate. I use this for downloading into the EVM the
new 38k4baud modem...
	Sources & exec available at www.chasque.apc.org/franky into "Download
Files" section.

	73 de Nando, CX6DD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: DL32 with settable baudrate

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Sat, 8 Apr 2000 14:22:57 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76198-2000.04.08-16.23.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Great stuff.

How do you setup the 38k modem?

What Bios version etc do you use ?

Is it in flash memory?

----- Original Message -----
From: "Fernando Mederos" <fmederos@adinet.com.uy>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Friday, April 07, 2000 6:42 PM
Subject: [dsp] DL32 with settable baudrate

> Hi,
> I've added a 'b' argument to DL32 command-line to add the capability of
> selecting the desired baudrate. I use this for downloading into the EVM
the

> new 38k4baud modem...
> Sources & exec available at www.chasque.apc.org/franky into "Download
> Files" section.
>
> 73 de Nando, CX6DD
>
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: DL32 with settable baudrate

From: Fernando Mederos <fmederos@adinet.com.uy>
Date: Sun, 09 Apr 2000 17:03:45 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76427-2000.04.09-15.05.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Pat,
        Well, I'm just beggining my tests with UO36 and haven't had many
oportunities to receive its signal, mainly because of the sat being
unresponsive during night passes.

>How do you setup the 38k modem?

        Regarding the EVM I've done the following: I've recompiled Bios2.asm (I
think I got it from D.Braun's site) with PLL clock set to 68MHz and SCI
baudrate at 57600 in Leonid.asm. Programmed the flash with the new
Bios2.cld and g3ruh.cld (unchanged). Adjusted some volumes and LED
addresses in g38kruh.asm (the new modem), recompiled and got a g38kruh.lod
file.
        Now I just reset the EVM to use 9600 or use the new DL32@57600 to download
the new modem and use 38400.
        Needless to say I had to change all my sats config. in WiSP to talk to the
TNC at 57600baud.

        I am using a PCR-1000 in Wideband FM to receive UO36.

        73 de Nando, CX6DD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: DL32 with settable baudrate

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Sun, 9 Apr 2000 16:49:55 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76463-2000.04.09-18.50.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Nando

Thanks for the reply. Just the sort of information I was seeking.

You gave me an idea that I could perhaps use my Icom R7000 in wide FM mode
and receive the 38k.
It may be too wide since it receives the normal FM radio stations.

> >How do you setup the 38k modem?
>
> Regarding the EVM I've done the following: I've recompiled Bios2.asm (I
> think I got it from D.Braun's site) with PLL clock set to 68MHz and SCI
> baudrate at 57600 in Leonid.asm. Programmed the flash with the new
> Bios2.cld and g3ruh.cld (unchanged). Adjusted some volumes and LED
> addresses in g38kruh.asm (the new modem), recompiled and got a g38kruh.lod
> file.
> Now I just reset the EVM to use 9600 or use the new DL32@57600 to download

> the new modem and use 38400.
> Needless to say I had to change all my sats config. in WiSP to talk to the
> TNC at 57600baud.
>
> I am using a PCR-1000 in Wideband FM to receive UO36.
>
> 73 de Nando, CX6DD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: DL32 with settable baudrate

From: John Melton - Sun UK - ENS <John.Melton@UK.Sun.COM>
Date: Mon, 10 Apr 2000 08:23:28 +0100 (BST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76515-2000.04.10-02.24.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Nando,

>
>   I am using a PCR-1000 in Wideband FM to receive UO36.
>

Do you really mean the Wideband FM mode (270KHz)? The data output only comes
from the descriminator output of the FM-Narrow mode.

For UO36, I had the PCR-1000 setup in Narrow-FM mode, but on the 50KHz filter
(as you would set it up for receiving the LEO Weather satellites).

I found it worked fairly well, but you do need to track the doppler.

Regards,

-- John Melton n6lyt/g0orx

                Principal Systems Software Engineer
        ((Sun Microsystems,
      (|~~| Flour Daniel Centre East, Riverside Way
       `--'   Camberley, Surrey GU15 3YL England
       JAVA   Phone: +44 1276 416297 (internal ext 16297)
                Email: john.melton@uk.sun.com

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: DL32 with settable baudrate

From: Fernando Mederos <fmederos@adinet.com.uy>
Date: Mon, 10 Apr 2000 08:07:42 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76527-2000.04.10-06.09.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

John,

>Do you really mean the Wideband FM mode (270KHz)? The data output only
comes
>from the descriminator output of the FM-Narrow mode.

        Yes!, I put a new jack on the rear and routed there the WFDT signal thru a
47uF and 2K2 in series...

>For UO36, I had the PCR-1000 setup in Narrow-FM mode, but on the 50KHz
>I found it worked fairly well, but you do need to track the doppler.

        Good to know that!, I've had farily awful results with my setup... today I
copied only 3 lines of the directory in a 40deg pass :-(
I will try the narrower output next time.

        Regarding doppler, its a piece of cake with WiSPDDE3.0 software...

        Thankyou...

73 de Nando, CX6DD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: DL32 with settable baudrate

From: John Melton - Sun UK - ENS <John.Melton@uk.sun.com>
Date: Mon, 10 Apr 2000 12:24:36 +0100 (BST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76529-2000.04.10-06.25.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Nando,

> Good to know that!, I've had farily awful results with my setup... today
I
> copied only 3 lines of the directory in a 40deg pass :-(
> I will try the narrower output next time.
>
> Regarding doppler, its a piece of cake with WiSPDDE3.0 software...
>

I found that the EVM code was missing a lot of packets. I switched to a FX589
based modem from GMSK Data Products (http://www.gmskdata.co.uk).

The best results were with the Icom-821H with the Symek IFD board and the GMSK
modem ;-)

regards,

-- John Melton n6lyt/g0orx

Principal Systems Software Engineer
((Sun Microsystems,
(|~~| Flour Daniel Centre East, Riverside Way
`--' Camberley, Surrey GU15 3YL England
JAVA Phone: +44 1276 416297 (internal ext 16297)
Email: john.melton@uk.sun.com

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] 38k

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Mon, 10 Apr 2000 21:19:50 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76701-2000.04.10-23.19.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Nando

Thanks for the file.

I wanted to see if the EVM would work at 57600 so I installed the fsk1200
and tried to copy local packet stations with the Poor Mans packet program. I
did change the speed in the configuration file but no copy received.

Perhaps the Poor Man kiss packet program cannot run at 57600. It works okay
at 19200.

Have you ever used the program? and if so at 57600?

I am waiting on a 9600 satellite to try and see if I can get wisp to copy at
57600.

I wonder if all the other EVM programs will work at 57600?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: 38k

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Tue, 11 Apr 2000 07:20:29 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76749-2000.04.11-06.21.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

There are functions in the Leonid BIOs that derive timing from the
periodic interrupt that also provides the serial port clock.
The BIOS code "knows" what the serial port speed is, so if you change
the port speed, it theoretically adjusts all the timing correctly.
But there could be a bug somewhere...

Unless your PC is really wimpy, I would expect PMP to work fine at 57600.

Doug Braun
NA1DB

At 09:19 PM 4/10/00 -0700, you wrote:
>Hi Nando
>
>Thanks for the file.
>
>I wanted to see if the EVM would work at 57600 so I installed the fsk1200
>and tried to copy local packet stations with the Poor Mans packet program. I
>did change the speed in the configuration file but no copy received.
>
>Perhaps the Poor Man kiss packet program cannot run at 57600. It works okay
>at 19200.
>
>Have you ever used the program? and if so at 57600?
>
>I am waiting on a 9600 satellite to try and see if I can get wisp to copy at
>57600.
>
>I wonder if all the other EVM programs will work at 57600?
>
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Re: DL32 with settable baudrate

From: Mike Murphree <murphree1@ispchannel.com>
Date: Tue, 11 Apr 2000 06:19:55 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76750-2000.04.11-06.23.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Tue, 11 Apr 2000, you wrote:
>
> I found that the EVM code was missing a lot of packets. I switched to a FX589
> based modem from GMSK Data Products (http://www.gmskdata.co.uk).

That link doesn't seem to work anymore, but the information on that chip is
available at:

http://www.mxcom.com/prod_info/pi589A-2.htm

Mike N4CNW

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] Re: DL32 with settable baudrate

From: Charles H Brain <chbrain@dircon.co.uk>
Date: Tue, 11 Apr 2000 13:57:24 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76757-2000.04.11-07.55.46--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Mike Murphree wrote:
>
> On Tue, 11 Apr 2000, you wrote:
> >
> > I found that the EVM code was missing a lot of packets. I switched to a FX589
> > based modem from GMSK Data Products (http://www.gmskdata.co.uk).
>
> That link doesn't seem to work anymore, but the information on that chip is
> available at:

I have a couple of their TNCs for sale, they are just cluttering up the office.

- Charles G4GUO

(Well it was worth a try!)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] Re: 38k

From: Johan Forrer <forrerj@peak.org>
Date: Tue, 11 Apr 2000 08:43:22 -0700 (PDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76773-2000.04.11-10.43.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

I have used 57600 with good success using the EVM's JVFAX demodulator.
Besides the rate-related stuff in LEONID, just make sure that the modem
code does initialize the serial rate correctly as that is clock-speed
dependent. Might be worth looking into how that is done.

Good luck!

Johan, KC7WW

On Tue, 11 Apr 2000, Douglas Braun & Nadia Papakonstantinou wrote:

> There are functions in the Leonid BIOs that derive timing from the
> periodic interrupt that also provides the serial port clock.
> The BIOS code "knows" what the serial port speed is, so if you change
> the port speed, it theoretically adjusts all the timing correctly.
> But there could be a bug somewhere...
>
> Unless your PC is really wimpy, I would expect PMP to work fine at 57600.
>
> Doug Braun
> NA1DB
>
> At 09:19 PM 4/10/00 -0700, you wrote:
> >Hi Nando
> >
> >Thanks for the file.
> >
> >I wanted to see if the EVM would work at 57600 so I installed the fsk1200
> >and tried to copy local packet stations with the Poor Mans packet program. I
> >did change the speed in the configuration file but no copy received.
> >
> >Perhaps the Poor Man kiss packet program cannot run at 57600. It works okay
> >at 19200.
> >
> >Have you ever used the program? and if so at 57600?
> >
> >I am waiting on a 9600 satellite to try and see if I can get wisp to copy at
> >57600.
> >
> >I wonder if all the other EVM programs will work at 57600?
> >
> >
> >
> >---
> >You are currently subscribed to dsp as: dougnad@bellatlantic.net
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

> ---
> You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: 38k

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Tue, 11 Apr 2000 14:32:52 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76821-2000.04.11-16.33.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks for all the replies.

I can copy the 9600 satellites with Wisp and the EVM set at 57600.

This tell me that the PC, EVM and Wisp can operate with the serial port at
57600.

However PMP Poor Man.s Packet will not work. I did change the serialport
speed to 57600 in the configuration file.

Anyone have PMP working at this speed?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] PMP and 57600 baud serial port

From: Doug Braun <dougnad@bellatlantic.net>
Date: Tue, 11 Apr 2000 17:48:03 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76825-2000.04.11-16.49.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Pmp is a 16-bit DOs program. It uses the time-honored technique
of direct hardware access to do serial I/O.

Here is the code that actually sets the baud rate:

```
>void SetBaudRate(int baud, int mode) {
>     outp(comport->lcr, mode|0x80);
>     outp(comport->data, (12L*9600L/(long)baud) & 0xff);
>     outp(comport->ier,  (12L*9600L/(long)baud) >> 8);
>     outp(comport->lcr, mode);
>}
```

Possibly this sets up things wrong for 57600. Also, accessing
serial ports DOS-style under Windows may create problems.
If anyone can test PMP at 57600 while running actual DOS
instead of Windows, it would good to know if it works that way.

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] 38K&EVM

From: Fernando Mederos <fmederos@adinet.com.uy>
Date: Wed, 12 Apr 2000 07:26:30 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76916-2000.04.12-05.38.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,
        It worked!
        Thanks to John's advise of using the standard packet output of the

PCR-1000, the EVM decoded 400K from a 50+ deg. elevation pass of UO-36.
Modem used was the version by the Spanish team, wich is still under
developement.
        Mean efficiency was 50% during the pass but could have been better if the
flipping had worked, I got my antennas making a full turn in the middle of
the pass :-(.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: 38K&EVM

From: John Melton - Sun UK - ENS <John.Melton@uk.sun.com>
Date: Wed, 12 Apr 2000 12:04:38 +0100 (BST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76922-2000.04.12-06.05.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Fernando,

>   It worked!
>   Thanks to John's advise of using the standard packet output of the
> PCR-1000, the EVM decoded 400K from a 50+ deg. elevation pass of UO-36.
> Modem used was the version by the Spanish team, wich is still under
> developement.
>   Mean efficiency was 50% during the pass but could have been better if
the
> flipping had worked, I got my antennas making a full turn in the middle of
> the pass :-(.

good news ;-)

I think a lot of people dismissed the PCR-1000 because of its relatively cheap
price. I bought mine originally purely to check out it's ability to copy the
38k4 satellites!

-- John Melton n6lyt/g0orx

                Principal Systems Software Engineer
        ((Sun Microsystems,
      (|~~| Flour Daniel Centre East, Riverside Way
       `--'   Camberley, Surrey GU15 3YL England
       JAVA   Phone: +44 1276 416297 (internal ext 16297)
                Email: john.melton@uk.sun.com

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] R7000

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Thu, 13 Apr 2000 11:22:33 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-77325-2000.04.13-13.23.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Anyone use a Icom R7000 receiver to receive UO-36 38.4K signal?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] wanted Motorola DSP56002EVM

From: "Larry Kayser" <kayser@sympatico.ca>
Date: Fri, 14 Apr 2000 13:18:56 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-77482-2000.04.14-12.22.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am looking for a Motorola DSP56002EVM board, second hand is OK if it has
not been modified.

Please reply to above, kayser@sympatico.ca

Thanks

Larry
VA3LK

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

22. [dsp] 38k4 code for the 56002 EVM

From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Sat, 15 Apr 2000 16:27:33 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-77758-2000.04.15-15.28.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

All,

I've hacked in the LED changes for the original .17 release of the 38k4 code for the 56002 evm/RI. If you'd like a copy of it, I can send it over with the simple instructions on how to move over to the bios2 with 57600 serial support and the 38k4 code.

I've been running everything at 57600 including all my g3ruh, psk, and fsk1200 code and I've been testing the .17 release of the 38k4.

I'm using a PCR1000 and an 847 to test with. So far I'm pretty impressed. I've seen as high as 92% effic, with a very simple setup.

I'm running the 1000 with an SSB preamp in front of it with the very simple 19" 2mtr whip as the RX antenna. (my tower is on it's way and the directional beams are assembled and in the basement waiting :-)

I haven't been able to talk to the sat yet, but I think I stumbled on a fix for that today. I was trying to set the symbol rate (might be wrong words) to 38k4 on TX as well as RX.... Small problem. The 847 won't do that! I've now changed to a 9k6 TX and we'll see on these next two passes.

Bottom line, I'm using the Bios2 version from Doug, and only 4 files from the .17 release of g38kruh. The 4/99 release from Doug Braun of leonid and bios2 are the basics.

Anyway, just thought I'd pass this along.

I'll build a zip and have it ready if you want to play.

Just drop me a note in email.

Thanks,
Alan

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] Newbie? What's the code compatible replacement for the DSP56002EVM

From: Brooke Clarke <brooke@pacific.net>
Date: Tue, 18 Apr 2000 08:59:50 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-78407-2000.04.18-11.00.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I want to start working with the 56002 and have code for it, but the DSP56002EVM is no longer available.
Is there a replacement that's code compatible and fits in the TAPR box?

73,

Brooke - N6GCE

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

24. [dsp] Re: wanted Motorola DSP56002EVM - Possible Source!

From: "Thomas M. Alldread" <tma@mail.island.net>
Date: Sat, 22 Apr 2000 20:08:19 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-79326-2000.04.22-22.09.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> I am looking for a Motorola DSP56002EVM board, second hand is OK if it has
> not been modified.
>
> Please reply to above, kayser@sympatico.ca
>
> Thanks
>
> Larry
> VA3LK

Greetings Larry:

I just noticed a DSP56002EVM advertised on page 23 of the April 1 - May 24, 2000 Newark Electronics flyer discounted from $359.08 to $310.00 Cdn funds. They refer to page 856 of their main catalog 117 which just lists the DSP56002EVM as complete with software.

They are also located in Ontario and their toll free number is:

1-800-463-9275

I hope this information is of value to you and good luck.

73 & Enjoy!
Tom, VA7TA
tma@mail.island.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] OT: What has happened to arrl.org?

From: Eduardo Jacob <jtpjatae@bi.ehu.es>
Date: Tue, 25 Apr 2000 13:18:18 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-79855-2000.04.25-06.23.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

It seems that arrl.org domain has been taken/purchased/stolen? by somebody else. Does anybody news about this?. Does anybody have the IP address of the mail server of ARRL?

Eduardo/EA2BAJ

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] RE: OT: What has happened to arrl.org?

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Tue, 25 Apr 2000 11:39:05 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-79858-2000.04.25-06.40.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Eduardo,

It looks like it has been hacked. Unfortunately there are children who like to do that sort of thing. Several major US companies have been hit lately.

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

27. [dsp] RE: OT: What has happened to arrl.org?

From: Eduardo Jacob <jtpjatae@bi.ehu.es>
Date: Tue, 25 Apr 2000 14:06:03 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-79863-2000.04.25-07.12.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>It looks like it has been hacked. Unfortunately there are children who like
>to do that sort of thing. Several major US companies have been hit lately.

I do hope that it only meant that. In www.internic.net it appears
again the the owner is arrl.org.

Eduardo

Eduardo Jacob - Area de Ingenieria Telematica
Departamento de Electronica y Telecomunicaciones
ETSII y de IT   Tel: +34 94 601 4214
UPV / EHU   Fax: +34 94 601 4259
Alda Urquijo s/n   E-mail: jtpjatae@bi.ehu.es
E-48013 - Bilbao (Spain)
PGP Key available: Send email w/subject: PGPKEY
fingerprint   : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

28. [dsp] RE: OT: What has happened to arrl.org?

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Tue, 25 Apr 2000 12:34:01 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-79865-2000.04.25-07.35.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Just got off the phone. They are aware of the problem, and are working on
it.

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

29. [dsp] RE: OT: What has happened to arrl.org?

From: "Ronald C. Barnes" <ka1kjz@home.com>
Date: Tue, 25 Apr 2000 23:24:10 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-80025-2000.04.25-22.24.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Until the bogus DNS shakes out....   www.arrl.net still works.

At 12:34 PM 4/25/00 +0000, you wrote:
>Just got off the phone. They are aware of the problem, and are working on
>it.
>
>
>Alan
>WA4SCA
>
>
>---
>You are currently subscribed to dsp as: ka1kjz@home.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

30. [dsp] EasyDSP

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Wed, 26 Apr 2000 10:48:30 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-80133-2000.04.26-12.49.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Can EasyDSP software run on a normal DSP56002EVM without modifications?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

31. [dsp] Re: EasyDSP

From: Eduardo Jacob <edu@kender.es>
Date: Wed, 26 Apr 2000 23:28:22 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-80153-2000.04.26-16.30.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 10:48 26/04/00 -0700, you wrote:

>Can EasyDSP software run on a normal DSP56002EVM without modifications?

I don't think so, although the EasyDSP has a DSP4 emulation mode that runs BIOS + Leonid software.

Eduardo/EA2BAJ

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

32. [dsp] Re: EazyDSP/EVM code compatibility

From: forrerj@peak.org (Johan Forrer)
Date: Wed, 26 Apr 2000 20:59:31 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-80210-2000.04.26-22.57.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Someone sent me an e-mail (that I lost) regarding running the EazyDSP
version of CODE3.ASM on an EVM.

I was a bit puzzled why there was a need to reverse the port once again from
EazyDSP -> EVM because it already exists for the EVM?

This code taken from the EazyDSP library was adapted from the EVM library by
DF6JF for EasyDSP. The original CODE3.ASM being from the collection of Pawel
Jalocha, SP9VRC written for the EVM. There you'll find it as FSKIFACE.ASM
or in Doug's (N1OWU) collection, renamed as WEFAX.ASM --- all the same thing.

Just assemble FSKIFACE.ASM it and load it into the EVM together with BIOS2,
start it, switch serial ports, then run CODE3 in a DOS box on the PC (I
assume you have the DOS program called CODE3?)

Hope this helps. Sorry I lost the original e-mail.

Johan, KC7WW

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

33. [dsp] Re: EazyDSP/EVM code compatibility

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Wed, 26 Apr 2000 22:45:45 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-80234-2000.04.27-00.46.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Johan

Thanks for the information on the CODE3.

Bye

Pat

> Someone sent me an e-mail (that I lost) regarding running the EazyDSP
> version of CODE3.ASM on an EVM.
>
> I was a bit puzzled why there was a need to reverse the port once again
from
> EazyDSP -> EVM because it already exists for the EVM?
>
> This code taken from the EazyDSP library was adapted from the EVM library
by
> DF6JF for EasyDSP. The original CODE3.ASM being from the collection of
Pawel
> Jalocha, SP9VRC written for the EVM. There you'll find it as FSKIFACE.ASM
> or in Doug's (N1OWU) collection, renamed as WEFAX.ASM --- all the same
thing.
>
> Just assemble FSKIFACE.ASM it and load it into the EVM together with
BIOS2,
> start it, switch serial ports, then run CODE3 in a DOS box on the PC (I
> assume you have the DOS program called CODE3?)
>
> Hope this helps. Sorry I lost the original e-mail.
>
> Johan, KC7WW
>
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

May 2000

Original source file: dsp.0005
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0005

1. [dsp] Pack*BASH dinner at Dayton Hamvention 2000

From: John Ackermann <jra@febo.com> (by way of Greg Jones)
Date: Thu, 4 May 2000 14:27:08 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-81733-2000.05.04-14.34.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

```
Dayton Activities

Attending the 2000 Dayton Hamvention?  Then don't miss out on PACK*BASH!

What?
        An event for the digitally-inclined ham, featuring:
        *  Buffet dinner
        *  Keynote Address:  "Amateur Radio and Submarine NR-1"
           by CDR Chas Richard, W4HFZ, USN
        *  TAPR special interest group meetings
        *  "Birds of a Feather" gatherings

When?
        Friday evening, May 19, 2000
        Doors open at 7:00 pm; dinner served at 7:30 pm
        Speaker and meetings after dinner


Where?
        NCR "Sugarcamp" Conference Center, 101 W. Schantz Ave. --
        South of downtown Dayton, just west of Main St. (Rt 48).
        Maps available on the TAPR web site (www.tapr.org) or at the
        TAPR booth.


How?
        Dinner requires advance registration and payment through TAPR.
        Tickets will be available at the TAPR booth on Friday, though
        we strongly encourage registration <before> Hamvention.  The cost
        is $25.00 per person, tax and tip included.

        All amateurs are welcome to attend, enjoy the speaker, and
        particpate in the meetings, although only those purchasing a
dinner
        can eat.

        To register, contact:
        PACK*BASH
        c/o TAPR
        8987-309 E. Tanque Verde Road #337
        Tucson, AZ   85749-9399

        Phone: (940) 383-0000
        Fax: (940) 566-2544
        Internet: tapr@tapr.org

        Visa/Mastercard Accepted

Who?
        PACK*BASH is co-sponsored by TAPR -- Tucson Amateur Packet
Radio,
        the national leader in digital communication -- and the Miami
        Valley FM Association, Dayton's packet radio club.

For more information (including maps), go to
http://www.tapr.org/tapr/html/dayton.html, or send email to
tapr@tapr.org.
You can request information via packet radio at BASH@W8APR.#DAY.OH.USA.N
OAM.

--
John Ackermann   N8UR
Dayton, Ohio, USA
jra@febo.com --  http://www.febo.com
```

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] OFDM Project

From: "Basuki E. Priyanto" <basuki_ep@yahoo.com>
Date: Mon, 8 May 2000 13:07:53 -0700 (PDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82532-2000.05.08-15.09.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

Is there anybody involving in OFDM project ?
Maybe you can give me some idea ?

If I implement synchronization part in OFDM receiver
using training symbol synchronization which will do
correlation between training symbol (from Tx) and
training symbol (from Rx). But since the transmitter
process the training symbol use IFFT, Does it mean to
correlate the training symbol from Tx, the receiver
must create training symbol generator (usually PN seq)
and IFFT also ? (It means the receiver will have IFFT
(special for training symbol) and FFT)
or just make Look Up Table for the output of IFFT ?

Thanks .

Buzz

_____
Do You Yahoo!?
Send instant messages & get email alerts with Yahoo! Messenger.
http://im.yahoo.com/

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: OFDM Project

From: Charles H Brain <chbrain@dircon.co.uk>
Date: Mon, 08 May 2000 21:17:15 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82536-2000.05.08-15.17.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

"Basuki E. Priyanto" wrote:
>
> Hello,
>
> Is there anybody involving in OFDM project ?
> Maybe you can give me some idea ?
>
> If I implement synchronization part in OFDM receiver
> Thanks .
>
> Buzz
>
In my parallel tone modem I use a matched filter using
a FIR based correlator to get initial symbol sync. You
can also correlate the samples in the guard period, or
a technique I have just discovered uses an empty bin
in the transmit waveform to find sync, i.e the point where
there is the least amount of energy in the unused bin i.e
most orthogonal/best TX/RX alignment.

I had to discover a lot of this myself by trial and error.

- Charles

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Symek IFD with 821H

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Tue, 9 May 2000 07:40:55 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82728-2000.05.09-09.41.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Anyone using the Icom 821H with the DSP56002EVM and the Symek IFD for 38k?

If so how do you automate the switch from PSK to 9600 to 38k with three
different 821H demodulators?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Code for swept audio frequency measurement?

From: John Ackermann <jra@febo.com>
Date: Tue, 09 May 2000 11:28:06 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82736-2000.05.09-10.30.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I'm looking for software for either the EVM or a sound card that will let
me do swept audio frequency measurements.

Basically, I need an audio sweep generator coupled with an audio spectrum
analyzer to let me plot the response of an audio circuit.

Anyone know of such a beast?

John N8UR
jra@febo.com

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6. [dsp] Re: Code for swept audio frequency measurement?

From: Mike73@aol.com
Date: Tue, 9 May 2000 12:05:51 EDT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82743-2000.05.09-11.07.37--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

In a message dated 5/9/00 11:31:02 AM Eastern Daylight Time, jra@febo.com
writes:

> I'm looking for software for either the EVM or a sound card that will let
> me do swept audio frequency measurements.
>

CoolEdit 2000 will do it (swept sinewave output using a sound card).

Check:

http://www.syntrillium.com

73,
Mike, N1JEZ
AMSAT #29649
Local Area Coordinator
"A closed mouth gathers no feet."

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: Code for swept audio frequency measurement?

From: John Ackermann <jra@febo.com>
Date: Tue, 09 May 2000 12:26:26 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82752-2000.05.09-11.28.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

In message <LYR7892-82743-2000.05.09-11.07.37--jra#febo.com@lists.tapr.org>, Mi
ke73@aol.com writes:
>In a message dated 5/9/00 11:31:02 AM Eastern Daylight Time, jra@febo.com
>writes:
>
>> I'm looking for software for either the EVM or a sound card that will let
>> me do swept audio frequency measurements.
>>
>
>CoolEdit 2000 will do it (swept sinewave output using a sound card).
>
>Check:
>
>http://www.syntrillium.com

[slaps self on forehead]

Geez... I already have CoolEdit, and never spotted that capability. Cool!!!

73,
John

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8. [dsp] Re: Code for swept audio frequency measurement? (fwd)

From: John Ackermann <jra@febo.com>
Date: Tue, 09 May 2000 18:59:39 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82791-2000.05.09-18.01.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Following up on myself, I don't think the tools in CoolEdit 2000 do
what I'm looking for (unless I'm missing something). You can generate
a file with a swept sine wave, and you can play it through a device to
do a frequency analysis, but it's far from real-time and it's a
one-shot event.

I'm really looking for something that emulates a swept oscillator
triggering an oscilloscope and repeating, so you can do adjustments and
see the results in near-real-time.

Any ideas on a tool that does this with either a sound card or the EVM?

John N8UR
jra@febo.com

--
John Ackermann   N8UR
Dayton, Ohio, USA
jra@febo.com -- http://www.febo.com

-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.3a

mQBtAzgI9hgAAAEDAMiMQDZTVVuVIS0AscJ0Wy63oK4+Q5xvtxbX/ZoG1qCOuYDI
Fph4/RqL9vVEItWBy6ISk+zbkATzPgy84nrI7+GBtld4F9DoHWARQXjC1I8cFZjY
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bGnpuTxinuW/gKaI3bt2MC8QZZq0gy2de26907lE2A==
=UHWl
-----END PGP PUBLIC KEY BLOCK-----

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9. [dsp] Re: Code for swept audio frequency measurement? (fwd)

From: Mike73@aol.com
Date: Wed, 10 May 2000 06:51:57 EDT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Cc: dsp@lists.tapr.org
Message-ID: <LYR3532-82915-2000.05.10-05.54.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

In a message dated 5/9/00 7:01:54 PM Eastern Daylight Time, jra@febo.com
writes:

> it's a
> one-shot event.

Hi John,

I use a really short sweep time, and set Loop Mode so it repeats.
For instance under Generate | Tones | Intitial settings (unlocked):
Set Base Freq at 100 Hz (zero the modulation settings).
Set Duration to .1 sec
Next under Final Settings:
Set Base Freq at 10000 Hz
After the wave form is created, make sure it is all selected in the waveform
window and go to Options | Loop mode.
Play it! It should do a 100 - 10000 Hz sweep in .1 sec and repeat until you
stop it.

Hope this helps...

Mike Seguin
Chief Engineer
WVMT-AM WXXX-FM

You are currently subscribed to dsp as: lyris.dsp@tapr.org
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10. [dsp] RE: Code for swept audio frequency measurement?

From: Mastenbrook Gary-G13216 <Gary.Mastenbrook@motorola.com>
Date: Wed, 10 May 2000 08:17:00 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82943-2000.05.10-08.18.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

John- Can we clarify the (desired) requirements a little more? I too am
looking for a audio tool which would do similar things to what you've
mentioned. I'm targeting the 56K EVM platform since I'd like to use phase
if possible. In general, I'm looking for the audio equivalent of my RF
spectrum analyzer/tracking generator combination. Listing out the desired
capabilities we have:

Task #1. Generate a swept sine wave audio signal which varies from a given
start frequency to a given stop frequency and with a given dwell time on a
given step increment size. Source should cleanly change frequencies between
steps with a minimum of phase jumps and other irregularities.

Task #2. While task #1 is executing, simultaneously receive and process
audio at the Task #1's operating frequency, process the audio tones received
for amplitude (& optionally for phase shift using the second channel input
as reference), and then output the frequency point/amplitude/phase data per
Task #3.

Task #3. For each sampled point in Task #2, the data point would be made
available via a spectrum analyzer display (using one or more D/A outputs to
a conventional analog oscilloscope) and also, create a data output stream
which would be exported via one of the EVM serial ports to a computer
system. (That way I can recreate the display on my computer using LabVIEW
as well as save screen snapshots, etc.)

I've seen a program which accomplishes the spectrum analyzer steps of Tasks
#2 & #3 including the scope display (without the phase capability), but have
not seen one which adds in the source or processed data output capabilities.
I assume this is your perspective too?

Does what I've outlined above match up with what you're trying to
accomplish? I've been watching for some time now for these functions to
appear on the EVM platform, but have had no success to date.

73's

Gary N8DMT

Gary Mastenbrook, Product Visioneering, Motorola, Inc.
50 E. Commerce Drive, Schaumburg, IL 60173

Email: g13216@email.mot.com
Work Home Page: http://www.mot.com/telematics
Personal Home Page: http://www.qsl.net/n8dmt

-----Original Message-----
From: John Ackermann [mailto:jra@febo.com]
Sent: Tuesday, May 09, 2000 5:00 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Re: Code for swept audio frequency measurement? (fwd)

Following up on myself, I don't think the tools in CoolEdit 2000 do
what I'm looking for (unless I'm missing something). You can generate
a file with a swept sine wave, and you can play it through a device to
do a frequency analysis, but it's far from real-time and it's a
one-shot event.

I'm really looking for something that emulates a swept oscillator
triggering an oscilloscope and repeating, so you can do adjustments and
see the results in near-real-time.

Any ideas on a tool that does this with either a sound card or the EVM?

John N8UR
jra@febo.com

--
John Ackermann   N8UR
Dayton, Ohio, USA
jra@febo.com -- http://www.febo.com

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] For Sale: 56002EVM/TAPR Interface kit

From: Rich Mulvey <mulveyr@imame.com>
Date: Sun, 14 May 2000 16:47:12 -0400 (EDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83852-2000.05.14-15.52.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

For Sale:

   Motorola 56002EVM mounted in the TAPR Radio Interface kit.

   Includes the original Motorola documentation + CD that came with the EVM.
   Also includes flash RAM, serial cable, and wall-wart power supply.

   The setup works fine - I've been used it mostly for 1200bps VHF packet (
which is currently the default flashed modem). However, I have enough PC's
with sound cards now that it's just gathering dust, and should go to someone
who will make use of it.

   Asking $225.00 - buyer pays shipping.

- Rich
AA2YS

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: dsp digest: May 14, 2000

From: Brooke Clarke <brooke@pacific.net>
Date: Sun, 14 May 2000 22:13:48 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83941-2000.05.15-00.15.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Rich:

Would emial me about the 56002?

I tried to send you email , but it bounced.

Thanks,

Brooke Clarke - N6GCE
brooke@pacific.net

TAPR DSP Special Interest Group digest wrote:

> TAPR DSP Special Interest Group Digest for Sunday, May 14, 2000.
>
> 1. For Sale: 56002EVM/TAPR Interface kit
>
> --
>
> Subject: For Sale: 56002EVM/TAPR Interface kit
> From: Rich Mulvey <mulveyr@imame.com>
> Date: Sun, 14 May 2000 16:47:12 -0400 (EDT)
> X-Message-Number: 1
>
> For Sale:
>
>   Motorola 56002EVM mounted in the TAPR Radio Interface kit.
>
>   Includes the original Motorola documentation + CD that came with the EVM.
>   Also includes flash RAM, serial cable, and wall-wart power supply.
>
>   The setup works fine - I've been used it mostly for 1200bps VHF packet (
> which is currently the default flashed modem). However, I have enough PC's
> with sound cards now that it's just gathering dust, and should go to someone
> who will make use of it.
>
>   Asking $225.00 - buyer pays shipping.
>
> - Rich
> AA2YS
>
> ---
>
> END OF DIGEST
>
> ---
> You are currently subscribed to dsp as: brooke@pacific.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
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13. [dsp] Spectran beta 3, build 262

From: Alberto di Bene <dibene@usa.net>
Date: Tue, 16 May 2000 12:08:39 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-84203-2000.05.16-05.12.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The version beta 3, build 262 of Spectran is now available at the URL :
  http://www.weaksignals.com

It is a spectral analysis software, still in beta, expecially tailored for
EME and VLF work. Freeware.

Alberto   I2PHD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] 38k

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Tue, 16 May 2000 11:03:48 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-84293-2000.05.16-13.21.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi

Need your help again.

I installed the Symek IFD so I could receive the 38k from UO-36.

Well it is not working for the 38k signal even when the satellite is over my
QTH.

I wanted to see if the DSP is working so I connected the IN to the Out. Then
I use WinPack with AGWPE to send some text. It did not work for the 38K .
This method worked to test the PSK, FSK1200 and the 9600 modems.

Any Ideas?

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15. [dsp] Re: 38k

From: "Johann Lochner" <lochner@ing.sun.ac.za>
Date: Tue, 16 May 2000 22:07:41 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-84312-2000.05.16-15.09.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Pat,

> I installed the Symek IFD so I could receive the 38k from UO-36.
>
> Well it is not working for the 38k signal even when the satellite
> is over my QTH.
>
> I wanted to see if the DSP is working so I connected the IN to the
> Out. Then I use WinPack with AGWPE to send some text. It did not
> work for the 38K . This method worked to test the PSK, FSK1200
> and the 9600 modems.
>
> Any Ideas?

It seems that we are at the same stage of the experiment. Sunday
evening I received my first UO-36 signals through the Symek IFD,
using WiSP to activate the bird. I've just managed to get AGWTERM
running with AGWPE and the EVM looped back at 38k4. Remember that
9k6/38k4 is needed for UO-36 whilst 38k4/38k4 is used for loopback
tests. Hopefully I'll make my first full duplex contact tomorrow
evening. It will be interesting to see how the bandwidth impaired
EVM handles the UO-36 signal.

Good luck,
Johann Lochner, ZR1CBC

+---+
  JG Lochner ESL, Universiteit van Stellenbosch
  e-pos: lochner@ing.sun.ac.za
  webtuiste: http://esl.ee.sun.ac.za/~lochner
+---+

You are currently subscribed to dsp as: lyris.dsp@tapr.org
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16. [dsp] Re: 38k

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Tue, 16 May 2000 16:12:48 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-84331-2000.05.16-18.15.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Johann

Thanks for your reply.
What TNC type did select in AGWPE?

The serial port speed in AGWPE show 56000 not 57600. Do you know why?

Yes I did the loop Correctly. I will try AGWTERM and see if it make a
difference.
Is Uo-36 the only signal source?

>
> It seems that we are at the same stage of the experiment. Sunday
> evening I received my first UO-36 signals through the Symek IFD,
> using WiSP to activate the bird. I've just managed to get AGWTERM
> running with AGWPE and the EVM looped back at 38k4. Remember that
> 9k6/38k4 is needed for UO-36 whilst 38k4/38k4 is used for loopback
> tests. Hopefully I'll make my first full duplex contact tomorrow
> evening. It will be interesting to see how the bandwidth impaired
> EVM handles the UO-36 signal.
>
> Good luck,
> Johann Lochner, ZR1CBC>
>

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] Re: 38k

From: "Johann Lochner" <lochner@ing.sun.ac.za>
Date: Wed, 17 May 2000 13:21:01 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-84478-2000.05.17-06.23.02--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Pat,

> Thanks for your reply.
> What TNC type did select in AGWPE?
> The serial port speed in AGWPE show 56000 not 57600. Do you know why?

The TAPR TNC-2. I cleared all the TNC control commands. Don't think
it really matters, though. I noticed the strange baud rate also. It
seemed to work okay at 56000; maybe a typo?

> Yes I did the loop Correctly. I will try AGWTERM and see if it make a
> difference. Is Uo-36 the only signal source?

I don't know of any other sources. The signal from UO-36 seems to
have a raised cosine alpha much higher than that used in g38kruh.asm
(anyone knows what it is?). Hopefully we'll have 28k8 or 38k4
running on Sunsat at some future time. However, the maximum swing
from the onboard 56L002 only allows 3 kHz frequency deviation (what
do they use for UO-36?). We've got a good SNR, though.

Regards,
Johann

+---+
  JG Lochner ESL, Universiteit van Stellenbosch
  e-pos: lochner@ing.sun.ac.za
  webtuiste: http://esl.ee.sun.ac.za/~lochner
+---+

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18. [dsp] Re: 38k

From: Itziar Martinez <itziar@bips00.bi.ehu.es>
Date: Tue, 23 May 2000 20:17:25 +0200 (CET)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-85611-2000.05.23-13.26.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Johan

I have read the following and I think I can help you

> I don't know of any other sources. The signal from UO-36 seems to
> have a raised cosine alpha much higher than that used in g38kruh.asm
> (anyone knows what it is?).

The raised cosine filter is defined by two parameters, the bit rate and
the roll-off factor, that one you call alfa and that is also known as beta
or ro. This two parameters limit the bandwidth, so that the total used
bandwidth can be expresed as bit_rate*(1+roll-off_factor)/2.

The raised cosine filter in the UO-36 has a roll-off factor of 0.3 while
the one in the gk38kruh.asm has one of 0.2 (because the bandwidth of 0.3
does not fit in the bandwith of the codec when at 38k4).

So this affects on the snr required to recibe your signal. It should be a
bit higher with the g38kruh.asm when the modem in the UO-36 transmit than
if you have a hardware g3ruh modem.

This change has been only made at 38k4. The filter hat a roll-off factor
of 0.3 for the rest of the bit rates.

Itziar

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: 38k

From: "Johann Lochner" <lochner@ing.sun.ac.za>
Date: Tue, 23 May 2000 22:22:22 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-85638-2000.05.23-15.24.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Itziar,

Thanks for the reply (and for all the work you've already done on the
'overclocked' G3RUH). Other commitments over the last couple of days
kept me from completing my experiments with the 38k4 modem and Symek
IFD module. Maybe this coming weekend :-)

> The raised cosine filter is defined by two parameters, the bit rate
> and the roll-off factor, that one you call alfa and that is also
> known as beta or ro. This two parameters limit the bandwidth, so
> that the total used bandwidth can be expresed as
> bit_rate*(1+roll-off_factor)/2.
>
> The raised cosine filter in the UO-36 has a roll-off factor of 0.3
> while the one in the gk38kruh.asm has one of 0.2 (because the
> bandwidth of 0.3 does not fit in the bandwith of the codec when at
> 38k4).

The problem is worse than you think. The audio bandwidth of the 9k6
G3RUH is 7200 Hz. Thus the roll-off factor (alpha) is 0.5. For an
alpha of 0.5 the maximum bit rate will be less than 32 kbit/s (codec
sampling at 48 kHz). Up to 28k8 you should use 0.5.

According to Zeno Wahl (of the UO-36 control team) their alpha equals
0.6 (with a deviation of 18 kHz, and a 10 W power output). Using the
IFD module, the higher alpha is very noticeable in their eye pattern.

> So this affects on the snr required to recibe your signal. It
> should be a bit higher with the g38kruh.asm when the modem in the
> UO-36 transmit than if you have a hardware g3ruh modem.
>
> This change has been only made at 38k4. The filter hat a roll-off
> factor of 0.3 for the rest of the bit rates.

For the unmodified EVM, receiving 38k4 from UO-36, alpha should at
least approach 0.25. Has anyone hooked up a faster A/D yet?

Regards,
Johann

+---+
  JG Lochner ESL, Universiteit van Stellenbosch
  e-pos: lochner@ing.sun.ac.za
  webtuiste: http://esl.ee.sun.ac.za/~lochner
+---+

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] Audio spectrum analyser for EVM.

From: "Eddy Van de Velde" <van.de.velde.eddy@skynet.be>
Date: Tue, 23 May 2000 22:59:23 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-85644-2000.05.23-16.02.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

Can anyone tell me if there is software available for the EVM56002 for an audio spectrum analyser.
Preferably in CLD format so that I can load with the bootstraploader via the host port and run it on the
 host port. Working under Windows 98.

Where can I find and download it?

Thanks very much beforhand.

Eddy ON5UQ.

21. [dsp] Dupes

From: "Jerry Ross" <dittybop@pacbell.net>
Date: Tue, 23 May 2000 18:35:55 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-85703-2000.05.23-20.38.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

As of 4/22/2000 @ 8:11 PM I have been receiving duplicates from this
reflector. Is there anyone else receiving dupes?

Jerry
WA6DQU

22. [dsp] Re: Audio spectrum analyser for EVM.

From: "Paulus" <paulstra@xs4all.nl>
Date: Wed, 24 May 2000 21:30:17 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-85882-2000.05.24-14.32.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hoi Eddy, ik heb ergens de analyser van g3plx.
Mocht je die zoeken dan stuur ik hem

Cheerio
73 de Paul, pa0ocd

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] FW: 38k4 and the EVM56002/RI

From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Wed, 24 May 2000 22:27:50 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-86141-2000.05.24-21.30.46--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I sent this to the Amsat-bb list and figured I'd copy it over here as well.

Enjoy!
Alan

-----Original Message-----
From: Alan K. Adamson [mailto:ne1h@ne1h.dyndns.org]
Sent: Wednesday, May 24, 2000 10:27 PM
To: amsat-bb@amsat.org
Subject: 38k4 and the EVM56002/RI

All,

I sent out a similar note about a month or so ago.

I've been tweaking on the .17 release of the G38kRuh code. I've hacked in support for the EVM/RI and now thanks to Doug Braun, I've hacked in the support for RX on the Radio2 port. I know how to do the TX on radio2 as well, but just haven't put it in yet as I don't use it that way. I will do so in the very near future as I have a friend that is wanting it.

Anyway, I figured I'd let everyone know and if you'd like to drop me an email, I'll be happy to ship you a zip file with all the buildable applications and instructions.

This supports 57600 DTE rate on the serial port and if you use it you will have to convert all your code over to 57600. It's really easy and I've included notes on how to do it.

Also, I've included a version of DL32 that Fernando (CX6DD) did that support 57600. This version was built with VC++ 6.0 and is a true 32 bit app.

I'm using the latest version of Doug's Leonid and Bios2 and it seems to work very well. I'm still waiting for my tower, another story, but with a wimpy antenna... 20" vertical whip over a 3foot sheet of metal, once I acquire UO-36 for the 4-5 mins that I have pass access, I get a consistent 95-100% efficiency. This with a PCR-1000 in 50khz mode as the RX and an 847 doing the TX... This is easily doable with doppler thanks to Fernando's WispDDE 3.0. I've turned on the load monitor and mapped it to an avail LED and I've never seen it go on, so I don't know what the magic is. Newer Bios??? or something. I'm running my EVM at 68mhz which is what Doug's Bios sets it up for.

I've been waiting for the 38k4 team to release something better, but until then... let me know!

Thanks
Alan Adamson
ne1h@ne1h.dyndns.org
Amsat #30117

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

24. [dsp] Re: Analog Digital Broadcast Radio development |help wanted|

From: "Hamoperator SM7UGT Marcel bos" <sm1ugt@hotmail.com>
Date: Thu, 25 May 2000 03:25:04 PDT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-86253-2000.05.25-05.27.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks for your response - allthow I was a bit late to answer...

I am looking for a project, I self just want to storm test my idea.

I am Think of a Modem signal placed at the Broadcast radio band..
The idea was to find a alternative way to make standard FM radios
useable for digital reception, witch othervice had to be replaced
and leaved in the after water.

If you like to join a prototyping project I would like then to
setup a email list for thoes who feel can solve the project
from start to end.

>From: Tim Baggett <aa5df@yahoo.com>
>Reply-To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>Subject: [dsp] Re: Analog Digital Broadcast Radio development |help wanted|
>Date: Fri, 12 Nov 1999 12:02:47 -0800 (PST)
>MIME-Version: 1.0
>From bounce-dsp-3082@lists.tapr.org Fri Nov 12 12:03:26 1999
>Return-Path: <aa5df@yahoo.com>
>Message-ID:
><LYR3082-49278-1999.11.12-14.16.11--SM1UGT#HOTMAIL.COM@lists.tapr.org>
>List-Unsubscribe: <mailto:leave-dsp-3532K@lists.tapr.org>
>List-Software: Lyris Server version 3.0
>List-Subscribe: <mailto:subscribe-dsp@lists.tapr.org>
>List-Owner: <mailto:owner-dsp@lists.tapr.org>

>X-List-Host: Tucson Amateur Packet Radio <http://www.tapr.org>
>X-Message-Id: <19991112200247.7829.rocketmail@web606.mail.yahoo.com>
>Sender: bounce-dsp-3082@lists.tapr.org
>Precedence: bulk
>
>
>
> > How much data can one transfer with
> > current modem technology on a 14.5 Khz Audiochannel?
>
>The absolute maximum rate you can transmit on the channel is defined by the
>Shannon Channel Capacity formula. It states that the maximum data rate you
>can
>transmit depends on the bandwidth of the channel (you state 14.5 KHz
>above)
>and the signal to noise ratio (you didn't specify).
>
>The practical limit highly depends on the modulation scheme you use, and
>error
>correcting methods (viterbi, turbo codes, etc.)
>
>I do not know what current technology will provide the fastest data rate
>over
>14.5 KHz though - perhaps someone else has a better grip of present
>technology.
>
> >
> > The channel has no return format so I guess there has to
> > be some sort of smart checksum error correction.
>
>Viterbi, turbocodes, and various block codes will allow you to do error
>correction on the receiving end. These codes may add extra bits to the data
>which will reduce your data rate thruput, but at least it will help
>guarantee
>you receive correct bits.
>
> >
> > How many CPU cyckels are needed in a such device? Ie how
> > much are left - ie suggest a good processor!
>
>
>This is highly dependant upon the modem technology / coding technology you
>choose. Basically, the less complicated modem you choose, the fewer DSP
>cycles
>you will require and the cheaper the DSP can be. However, you also will not
>achieve the fastest data rates. To achieve the fastest data rates
>approaching
>the limits of the Shannon channel capacity will require a lot of cutting
>edge
>technology and a lot of expensive DSP clock cycles.
>
>I'm probably being a bit unclear, but without a known target datarate and
>channel SNR, its difficult to determine which modem technology is best.
>
>There are some good modem folks on this list, so I'm sure you will read
>some
>other good comments.
>
>73,
>Tim
>AA5DF
>____
>Do You Yahoo!?
>Bid and sell for free at http://auctions.yahoo.com
>
>---
>You are currently subscribed to dsp as: SM1UGT@HOTMAIL.COM
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

____
Get Your Private, Free E-mail from MSN Hotmail at http://www.hotmail.com

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] Re: 38k

From: Fernando Mederos <fmederos@adinet.com.uy>
Date: Sun, 28 May 2000 15:48:58 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87073-2000.05.28-13.51.57--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,
        Has anyone tried to 'overclock' the CS4215 by setting a div. ratio of 448
in the Data format register? Sampling freq. would be near 55KHz but the
chip may still work well...
        If it works we may use an Alpha of 0.4 for 38400!.

        73 de Nando, CX6DD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] Re: 38k

From: Jake Janovetz <janovetz@tempest.ece.uiuc.edu>
Date: Sun, 28 May 2000 14:08:35 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87075-2000.05.28-14.09.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

You might also try overclocking by changing the crystal.

On Sun, May 28, 2000 at 03:48:58PM -0300, Fernando Mederos wrote:
> Hi,
>   Has anyone tried to 'overclock' the CS4215 by setting a div. ratio of 448
> in the Data format register? Sampling freq. would be near 55KHz but the
> chip may still work well...
>   If it works we may use an Alpha of 0.4 for 38400!.
>
>
>   73 de Nando, CX6DD
>
> ---
> You are currently subscribed to dsp as: JANOVETZ@UIUC.EDU
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

--
   janovetz@uiuc.edu | How can it be that mathematics, being after all a
 University of Illinois | product of human thought independent of experience,
                        | is so admirably adapted to the objects of reality?
        PP-ASEL | - Albert Einstein

Disclaimer: The policies of this University certainly do not reflect my
            own opinions, objectives, or agenda.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

27. [dsp] data aquistion

From: Herminio Duque Lustosa <duque@ceb.unicamp.br>
Date: Wed, 31 May 2000 09:08:51 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87610-2000.05.31-07.08.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

Could somebody indicate to me a board that do data aquisition (8-12 bits) with a
sampling rate of 60 Msamples or more and can run stand alone?

Attentionelly,

--
****
  Herminio Duque Lustosa
  Departamento de Engenharia Biomédica da Unicamp
  DEB/CEB-UNICAMP
  Caixa Postal 6040 - Campinas - SP - CEP: 13083-970

```
  Fone: 019 - 7887895/7888245    FAX: 019 - 2893346
  e-mail: duque@ceb.unicamp.br
**********************************************************



---
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```

28. [dsp] Bit stuffing ?

```
From: "Marcelo Puhl" <mark@plug-in.com.br>
Date: Wed, 31 May 2000 12:07:42 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87645-2000.05.31-10.09.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

```
About "bit stuffing",

- It is used in AFSK 1200 bps AX.25 Packet.

- It is not used in FSK 9600 bps AX.25 Packet.

Am I right ?


Marcelo Puhl
mark@plug-in.com.br
-----------------------------------------
Get paid to surf the WEB !
Ganhe dinheiro enquanto surfa na Internet !
http://alladvantage.com/go.asp?refid=DTJ608
-----------------------------------------

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

29. [dsp] Re: data aquistion

```
From: Henrique  Miranda <hmiranda@inescn.pt>
Date: Wed, 31 May 2000 14:52:07 +0100 (WEST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: TAPR DSP Special Interest Group <dsp@lists.tapr.org>
Message-ID: <LYR3532-87646-2000.05.31-10.09.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

```
Hello Herminio,

Take a look at:

 http://www.ultraviewcorp.com

They have plenty of A/D and D/A acquisition boards supporting rates up to
100 Msps.

Henrique Miranda

On Wed, 31 May 2000, Herminio Duque Lustosa wrote:

> Hi,
>
> Could somebody indicate to me a board that do data aquisition (8-12 bits) with a
> sampling rate of 60 Msamples or more and can run stand alone?
>
> Attentionelly,
>
>
> --
> **********************************************************
>   Herminio Duque Lustosa
>   Departamento de Engenharia Biomédica da Unicamp
>   DEB/CEB-UNICAMP
>   Caixa Postal 6040 - Campinas - SP - CEP: 13083-970
>   Fone: 019 - 7887895/7888245    FAX: 019 - 2893346
>   e-mail: duque@ceb.unicamp.br
> **********************************************************
>
>
>
```

> ---
> You are currently subscribed to dsp as: hmiranda@inescn.pt
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

30. [dsp] EVM source?

From: "Edward M. Myszka III" <mmyszka@HiWAAY.net>
Date: Wed, 31 May 2000 14:21:00 -0500 (CDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87689-2000.05.31-14.23.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Does anyone know where to buy a EVM 56002? I have tried all the sources
listed on the TAPR webpage with no luck. I would settle for used
hardware.

Thanks for any help,
Mike

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

31. [dsp] Spectrum analyser software

From: "Eddy Van de Velde" <van.de.velde.eddy@skynet.be>
Date: Wed, 31 May 2000 22:00:56 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87695-2000.05.31-15.03.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

Can anyone tell me if there is software available for an audio-spectrum analyser working under
windows98
for the EVM56002DSP ?
Preferably in CLD or ASM format so that I can load with the bootstraploader via the host port and run it
 from the same port.
Any info about where to search would be very welcome. I do have a spectrum analyser program for the EVM
but unfortunately, it only works under real MS-DOS modus.

Eddy ON5UQ.

32. [dsp] Re: Bit stuffing ?

From: "Tim Baggett" <tbaggett@austintx.net>
Date: Wed, 31 May 2000 22:20:11 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87744-2000.05.31-22.23.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> About "bit stuffing",
>
> - It is used in AFSK 1200 bps AX.25 Packet.
>
> - It is not used in FSK 9600 bps AX.25 Packet.

I believe bit-stuffing (not allowing more than 5 'ones' in a row) is dictated
by the AX.25 protocol, not the modulation scheme.

Since AX25 uses 0x7E to denote a frame flag, you must be certain that you do
not accidentally get this value in the data that you are transmitting. To
accomplish this, any time you see data with 6 ones in a row, you add a 7th
bit. On the receive end, any time you receive 7 ones in a row, you drop one of
them.

Now, GMSK (FSK) 9600 packet does require a data scrambler to prevent a long
series of ones or zeros in the data generating a large DC component in the
baseband spectrum.

Perhaps you are confusing the two.

73,
Tim

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June 2000

Original source file: dsp.0006
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0006

1. [dsp] Re: Spectrum analyser software

From: "PAT McGRATH" <patricio@cyberg8t.com>
Date: Thu, 1 Jun 2000 10:16:31 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87874-2000.06.01-12.19.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Which program do you have that works only under Dos?

  ----- Original Message -----
  From: Eddy Van de Velde
  To: TAPR DSP Special Interest Group
  Sent: Wednesday, May 31, 2000 1:00 PM
  Subject: [dsp] Spectrum analyser software

  Hello,

  Can anyone tell me if there is software available for an audio-spectrum analyser working under windows98
  for the EVM56002DSP ?
  Preferably in CLD or ASM format so that I can load with the bootstraploader via the host port and run it from the same port.
  Any info about where to search would be very welcome. I do have a spectrum analyser program for the EVM but unfortunately, it only works under real MS-DOS modus.

  Eddy ON5UQ.

2. [dsp] Re: Spectrum analyser software

From: "Eddy Van de Velde" <van.de.velde.eddy@skynet.be>
Date: Thu, 1 Jun 2000 22:45:28 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87903-2000.06.01-16.09.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The spectrum analyser program that I have is from g3plx and loaded with the bootstraploader in flash rom, also from g3plx
The docs say it will only work in dos and may even not work at all on slow maches. This because of very fast graphics and i/o on the serial port.
The program was downloaded from :
ftp://det.bi.ehu.es/pub/ham/evm/Fuentes/evmspec.zip

Eddy

  ----- Original Message -----
  From: PAT McGRATH
  To: TAPR DSP Special Interest Group
  Sent: Thursday, June 01, 2000 7:16 PM
  Subject: [dsp] Re: Spectrum analyser software

  Which program do you have that works only under Dos?

    ----- Original Message -----
    From: Eddy Van de Velde
    To: TAPR DSP Special Interest Group
    Sent: Wednesday, May 31, 2000 1:00 PM
    Subject: [dsp] Spectrum analyser software

    Hello,

    Can anyone tell me if there is software available for an audio-spectrum analyser working under windows98
    for the EVM56002DSP ?
    Preferably in CLD or ASM format so that I can load with the bootstraploader via the host port and run it from the same port.
    Any info about where to search would be very welcome. I do have a spectrum analyser program for the EVM but unfortunately, it only works under real MS-DOS modus.

    Eddy ON5UQ.

3. [dsp] looking for Rich Mulvey

From: "Myszka, Mike" <Mike.Myszka@tbe.com>
Date: Tue, 6 Jun 2000 08:48:11 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-89066-2000.06.06-08.52.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I apologize for wasting bandwidth here, but I am looking for someone on the
list.

Rich Mulvey, could you email me. I lost your email address.

Mike

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: Bit stuffing ?

From: Terry Fox <tfox@erols.com>
Date: Sun, 18 Jun 2000 12:14:51 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-91585-2000.06.18-11.17.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Bit stuffing is required as part of the AX.25 protocol. Without it, a
0x7E byte of data inside the frame would be interpreted as the end of
frame flag. The previous two bytes would be looked at as the
frame-check-sequence, (most likely failing that test. The frame would
then be tossed. The rest of the actual frame would also be tossed.

Terry, WB4JFI

Marcelo Puhl wrote:

> About "bit stuffing",
>
> - It is used in AFSK 1200 bps AX.25 Packet.
>
> - It is not used in FSK 9600 bps AX.25 Packet.
>
> Am I right ?
>
> Marcelo Puhl
> mark@plug-in.com.br
> --
> Get paid to surf the WEB !
> Ganhe dinheiro enquanto surfa na Internet !
> http://alladvantage.com/go.asp?refid=DTJ608
> --
>
> ---
> You are currently subscribed to dsp as: TFOX@EROLS.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Convolutional coder polynomials

From: Alberto di Bene <dibene@usa.net>
Date: Mon, 19 Jun 2000 11:20:11 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-91725-2000.06.19-04.26.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am reading the Tom McDermott's, N5EG, book 'Wireless Digital Communications,
Design and Theory", and I am wondering if someone could check with me the two
generating polynomials for the rate=1/2, k=7 coder that appear on page 145.

The last term of each polynomial is 1. IMHO, it should be X(0). i.e. the value of
X at time 0, and not X to the power of 0, which would yield 1, as written.

Did I miss completely the point ? I am a newcomer to the fascinatig field of coding
theory, and would like to have things straight before proceeding. I am also reading
the Rorabaughs' book 'Error coding theory', but, while he spends a considerable
amount of pages to describe the stack, Fano and Viterbi decoders, only very few
words are used to describe the coding process. Nowhere is described how to

compute the optimal polynomials for the various constraint lenghts.
There are vague words on the codeword 'free distance', but no suggestions are
given to find, even heuristically, wihch coding process optimizes it.
Any suggestions on where, may be on Internet, I can find some more
detailed description of the process ? Thanks.

Alberto   I2PHD

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: Convolutional coder polynomials

From: bsmeds@esoc.esa.de
Date: Mon, 19 Jun 2000 11:40:32 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-91727-2000.06.19-04.48.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alberto,
you could take a look at
http://www.ccsds.org/documents/pdf/CCSDS-101.0-B-4.pdf
that describes the convolutional coding and other coding techniques as used by
the space agencies.

Boris Smeds
DJ0EX, SM7GJ

Alberto di Bene <dibene@usa.net> on 2000-06-19 10:20:11

Please respond to "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
cc: (bcc: Boris Smeds/esoc/ESA)
Subject: [dsp] Convolutional coder polynomials

I am reading the Tom McDermott's, N5EG, book 'Wireless Digital Communications,
Design and Theory", and I am wondering if someone could check with me the two
generating polynomials for the rate=1/2, k=7 coder that appear on page 145.

The last term of each polynomial is 1. IMHO, it should be X(0). i.e. the value
of
X at time 0, and not X to the power of 0, which would yield 1, as written.

Did I miss completely the point ? I am a newcomer to the fascinatig field of
coding
theory, and would like to have things straight before proceeding. I am also
reading
the Rorabaughs' book 'Error coding theory', but, while he spends a considerable
amount of pages to describe the stack, Fano and Viterbi decoders, only very few
words are used to describe the coding process. Nowhere is described how to
compute the optimal polynomials for the various constraint lenghts.
There are vague words on the codeword 'free distance', but no suggestions are
given to find, even heuristically, wihch coding process optimizes it.
Any suggestions on where, may be on Internet, I can find some more
detailed description of the process ? Thanks.

Alberto   I2PHD

You are currently subscribed to dsp as: BSMEDS@ESOC.ESA.DE
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: Convolutional coder polynomials

From: Robert McGwier <rwmcgwier@home.com>
Date: Mon, 19 Jun 2000 06:18:17 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-91733-2000.06.19-05.22.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alberto, the other replies, which have told you to read have not explained.
The POWER on the polynomial is the DELAY. X^0, which is one, means
there is NO delay applied, and the last value for r=1/2, k=7 polynomial
would be x^6, meaning a delay of 6. Since that is delays of 0-6, that gives
you a constraint length of 7. Is that clear?

Bob

At 05:20 AM 06/19/2000 Monday, you wrote:
>I am reading the Tom McDermott's, N5EG, book 'Wireless Digital
>Communications,
>Design and Theory", and I am wondering if someone could check with me the two
>generating polynomials for the rate=1/2, k=7 coder that appear on page 145.
>
>The last term of each polynomial is 1. IMHO, it should be X(0). i.e. the
>value of
>X at time 0, and not X to the power of 0, which would yield 1, as written.
>
>Did I miss completely the point ? I am a newcomer to the fascinatig field
>of coding
>theory, and would like to have things straight before proceeding. I am
>also reading
>the Rorabaughs' book 'Error coding theory', but, while he spends a
>considerable
>amount of pages to describe the stack, Fano and Viterbi decoders, only
>very few
>words are used to describe the coding process. Nowhere is described how to
>compute the optimal polynomials for the various constraint lenghts.
>There are vague words on the codeword 'free distance', but no suggestions are
>given to find, even heuristically, wihch coding process optimizes it.
>Any suggestions on where, may be on Internet, I can find some more
>detailed description of the process ? Thanks.
>
>Alberto   I2PHD
>
>
>
>
>---
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8. [dsp] Re: Convolutional coder polynomials

From: Alberto di Bene <dibene@usa.net>
Date: 20 Jun 00 15:55:27 MET DST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-91975-2000.06.20-08.59.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Boris and Bob,
                  thanks for your answers. I will have a look at the
cited reference.

>The POWER on the polynomial is the DELAY. X^0, which is one, means
>there is NO delay applied, and the last value for r=1/2, k=7 polynomial
>would be x^6, meaning a delay of 6. Since that is delays of 0-6, that >gives
you a constraint length of 7. Is that clear?

Bob, maybe today (and perhaps not today only) I am a bit dense.

I don't see why the notations X^n should be used in that polynomial.
When computing it, you don't raise X to the nth power, you just take
the X delayed by n sampling periods. Perhaps it is a customary habit
derived by the conventions of the Z-transform.

If you, as I implied in my first message, take the notation X^n with
the meaning of 'X delayed by n periods', then X^0 is *not* 1. It is
simply the current value of X.
Of course, as always it is just a question of having a common
understanding on the notations used.

Just trying to understand before continuing the study with flawed basis.

Alberto   I2PHD

_____
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9. [dsp] EVM 56k2 flash eprom problem

From: "Bjoern Stokke" <bjoernstokke@c2i.net>
Date: Wed, 21 Jun 2000 12:58:49 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-92151-2000.06.21-06.02.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

my 56k2 evm board w/flash eprom has started to behave
abnormal - the content of the flash eprom is erased
whenever power to the evm board is cycled off/on.
Anyone experienced this b4 ?

73's
Bjoern LA5ZL

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10. [dsp] EVM 56K2 problem solved.

From: "Bjoern Stokke" <bjoernstokke@c2i.net>
Date: Thu, 22 Jun 2000 12:24:48 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-92344-2000.06.22-05.28.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Doug and others,

Thanks Doug for the hint, I'd given the wrong start adress :((

What puzzled me a bit was the fact that the program would
run from RAM after reset, and - sometimes - also even
after power off.

Sorry for the b/w!

Bjoern

I cannot imagine how a flaw in the EVM board could do this,
unless the code in the Flash includes routines to erase itself
that are being called accidentally.

The flash chip could be defective, but I suspect
that it is not really being programmed at all.
Remember that code is not directly executed from
the flash chip; it is copied to RAM (or from RAM

when the chip is prograqmmed).

Doug NA1DB

At 12:58 PM 6/21/00 +0200, you wrote:

Hi,

my 56k2 evm board w/flash eprom has started to behave
abnormal - the content of the flash eprom is erased
whenever power to the evm board is cycled off/on.
Anyone experienced this b4 ?

73's
Bjoern LA5ZL

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11. [dsp] Re: Convolutional coder polynomials

From: Alberto di Bene <dibene@usa.net>
Date: Fri, 23 Jun 2000 10:19:16 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-92552-2000.06.23-03.24.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I had already sent this message a few days ago, bu I haven't seen it
appearing on the list. As I sent it from the Web-based mail of
usa.net, I suspect that there is programmed (anti-spam) rejection
of all the traffic coming from that domain. I am resending it from
another domain.

==========

   Boris and Bob,
   thanks for your answers. I will have a look at the cited reference.

> The POWER on the polynomial is the DELAY. X^0, which is one, means
> there is NO delay applied, and the last value for r=1/2, k=7 polynomial
> would be x^6, meaning a delay of 6. Since that is delays of 0-6, that
>gives you a constraint length of 7. Is that clear?

   Bob, maybe today (and perhaps not today only) I am a bit dense.
   I don't see why the notations X^n should be used in that polynomial.
   When computing it, you don't raise X to the nth power, you just take
   the X delayed by n sampling periods. Perhaps it is a customary habit
   derived by the conventions of the Z-transform.

   If you, as I implied in my first message, take the notation X^n with
   the meaning of 'X delayed by n periods', then X^0 is *not* 1. It is
   simply the current value of X.
   Of course, as always it is just a question of having a common
   understanding on the notations used.

   Just trying to understand before continuing the study with flawed basis.

   Alberto I2PHD

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12. [dsp] Re: Convolutional coder polynomials

From: Robert McGwier <rwmcgwier@home.com>
Date: Fri, 23 Jun 2000 08:20:51 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-92582-2000.06.23-07.26.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alberto:

This may seem nonsensical but it is not. The properties of
convolutional codes and many other codes are most easily
learned by considering them to be mathematical objects of
certain types. In this case, the ring of polynomials (
x^6 + ... + 1 being one), and the properties that are derivable
from making this connection, are what leads mathematicians,
engineers, etc. to use this abstract construct to learn about
codes.

At 04:19 AM 06/23/2000 Friday, you wrote:
>I had already sent this message a few days ago, bu I haven't seen it
>appearing on the list. As I sent it from the Web-based mail of
>usa.net, I suspect that there is programmed (anti-spam) rejection
>of all the traffic coming from that domain. I am resending it from
>another domain.
>
>==
>
>   Boris and Bob,
>   thanks for your answers. I will have a look at the cited reference.
>
> > The POWER on the polynomial is the DELAY. X^0, which is one, means
> > there is NO delay applied, and the last value for r=1/2, k=7 polynomial
> > would be x^6, meaning a delay of 6. Since that is delays of 0-6, that
> >gives you a constraint length of 7. Is that clear?
>
>   Bob, maybe today (and perhaps not today only) I am a bit dense.
>   I don't see why the notations X^n should be used in that polynomial.
>   When computing it, you don't raise X to the nth power, you just take
>   the X delayed by n sampling periods. Perhaps it is a customary habit
>   derived by the conventions of the Z-transform.
>
>   If you, as I implied in my first message, take the notation X^n with
>   the meaning of 'X delayed by n periods', then X^0 is *not* 1. It is
>   simply the current value of X.
>   Of course, as always it is just a question of having a common
>   understanding on the notations used.
>
>   Just trying to understand before continuing the study with flawed basis.
>
>   Alberto I2PHD
>
>
>---
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---
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13. [dsp] EVM 38k4 code questions

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Fri, 23 Jun 2000 08:27:49 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-92585-2000.06.23-07.31.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks to Alan and his simple instructions, I finally moved my EVM to 57k6
serial speed and have the 38k4 code for the EVM as well.

I'm going to purchase the appropriate Symek filter for my TS-790 soon, but
was curious about the recent successes (and or/failures) of the EVM at
38k4. Shipping to the US is considerable, so if the EVM just won't do the
job, I might go ahead and order a TNC3 at the same time as the filter.

Can anybody provide some recent feedback or experiences with 38k4 and the
EVM?

Thanks and 73,

Mark L. Hammond [N8MH]

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July 2000

Original source file: dsp.0007
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0007

1. [dsp] 56002 SCI EVM nightmares

From: "Josh Karch" <jpk1@cec.wustl.edu>
Date: Fri, 7 Jul 2000 11:4:25
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95254-2000.07.07-11.08.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

I am not sure if you are still working with this particular board, the DSP56002 EVM, but I was wondering if you had ever written standalone SCI routines that collect data from a terminal into a DSP buffer and transmit data out of a buffer. I have been working for over four days straight trying to solve this problem. I have tried the examples in the book with respect to implementing an interrupt driven SCI interface. In all cases I have had strange difficulties in getting the EVM to perform the simple process of taking data from a serial link through the SCI, storing the data in a buffer, and then printing it back after the enter key is hit. In many cases I have tried simple polling of the serial port by polling the rdrf bit. When that bit is set data is received. The problem is that no matter what key I press, the SRX register always contains $0000FF. I have written a simple program that ignores the packing and unpacking of data, and simply utilizes the lowest 8 bits of register A1, and of all memory locations to store a string of data. The program is supposed to take in a string of characters, write the lower 8 bits of the register to a memory cell,detect when enter is hit, and print that string after enter is hit. The problem is that the port doesn't always work. I downloaded a program that uses the SCI, and it works fine, using similar initializations. Is there anything I am missing? Are my memory addresses a problem? Have I properly initialized the port for polling use? Here is the code fragment below. I have been trying for days using the EVM. I am beginning to think that there is a hardware defect with the EVM because loading data after a key is pressed (polling RDRF until RDRF=1) produces $0000FF in the SRX register. I am viewing this using a DEBUG_56K equivalent product called Boxview, in a memory window. I would appreciate any advice or help you can give me. The manual does not provide me with enough information to successfully run the serial port. Another possibility is that the Serial port may be defective. I have installed all the extra jumpers in order to make the port work--it just doesn't work reliably. Also, when loading a program using Debug_56K, do you recommend that I completely reset the evm before attempting to load another program and execute it? Thank you in advance for all your help.

Sincerely,

Joshua Karch

```
;My simple serial program

START   EQU     $40
PCC     EQU     $FFE1
SCR             EQU     $FFF0
SSR             EQU     $FFF1
SCCR            EQU     $FFF2
SRX             EQU     $FFF4
STXL            EQU     $FFF4
BCR             EQU     $FFFE
IPR             EQU     $FFFF
RXBUF           EQU     $100
        ORG     P:$0
        JMP    START


        ORG     P:START


;INITIALIZE THE SCI PORT AND RX, TX BUFFER POINTERS
                MOVEP   #$0302,X:SCR    ;enable TX/RX, set 1,8,1
                MOVEP   #$0020,X:SCCR   ;19200 baud
                MOVEP   #>$3,X:PCC  ;turn on ssi/sci

CHANGE  JSR     INPUT           ;input a string of data from the SCI
                MOVE    #RXBUF,R0       ;set the printer pointer to the beginning of the string
```

```
                JSR     PRINT           ;print data
                JMP     *               ;end

INPUT           CLR     A               ;clear these registers
                CLR     B
                MOVE    #$13,B1 ;definition of the enter key/cr
                MOVE    #RXBUF,R3       ;load input buffer pointer to rx address
                                        ;(Is address X:$100 a potential problem?)
INPUTMAIN       JCLR    #2,X:SSR,*      ;poll port to see if valid data received
                MOVEP   X:SRX,X:(R3)    ;write this data to the buffer
                MOVE    X:(R3)+,A1              ;move the data to A1 for comparison to cr key
                CMP     A,B                     ;compare
                JEQ     INOUT                   ;if so, exit routine
                JMP     INPUTMAIN               ;else keep inputting data
INOUT           RTS




PRINT           CLR     A                       ;clear
                CLR     B
                MOVE    #$13,B1 ;definition of the enter key/cr
PRINTMAIN       MOVE    X:(R0)+,A1              ;move string data to A1
                CMP     B,A                     ;if $13 is found amongst the data
                JEQ     OUT                     ;exit
                JCLR    #1,X:SSR,*              ;else wait for TDRE=1
                MOVEP   A1,X:STXL               ;write to SCI
                JMP     PRINTMAIN               ;keep printing
OUT             RTS                             ;leave
```

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2. [dsp] Re: 56002 SCI EVM nightmares

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Fri, 07 Jul 2000 17:07:51 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95302-2000.07.07-16.12.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Here is a wild guess: Are interrupts enabled?
If so, are there legal interrupt handlers
for the SCI interrupts?

Actually you should have handlers for ALL possible
interrupts.

Doug
NA1DB

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3. [dsp] Re: 56002 SCI EVM nightmares

From: "Josh" <skarch@techst02.technion.ac.il>
Date: Fri, 7 Jul 2000 20:23:24 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95320-2000.07.07-18.25.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

I think in the code I masked all interrupts with that instruction
ORI #3,MR

Does this turn off interrupts? Also, what are handlers? I am new to 56k
asm. I have been working with hc11/12 units for a long time--these are easy
to use by comparison. I wish I could find a simple program that inputs a
string of text on command, and then also prints text. This program that I
tried to write looks for an enter key $13 to determine the end of string
while printing. The wierd problem is that the output of the srx register is
always $FF no matter what happens. Therefore, no string is properly
received. Is there some generalized initialization code that should be used
for most non-interrupt driven programs that I should know about? what
should I do with the interrupt vectors? How do I create interrupt handlers,

are these routines that you fill in at the address of each interrupt vector?
Is it possible that there is a defect with my board if it works sometimes
and doesn't at other times, or is it some simple register that I forgot to
program that a previously working program might have handled?

I appreciate all the help I can get on this. If someone has an SCI routine,
interrupt driven or not, packed bytes or not, I would greatly appreciate all
of the help I can get.

In order to program the SCI, what are the things I need to know to make it
work? I think I may be missing an important line or two from the standalone
program that I wrote.

Thank you for your assistance,

Sincerely,

Joshua Karch

-----Original Message-----
From: bounce-dsp-18659@lists.tapr.org
[mailto:bounce-dsp-18659@lists.tapr.org]On Behalf Of Douglas Braun & Nadia
Papakonstantinou
Sent: Friday, July 07, 2000 11:08 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Re: 56002 SCI EVM nightmares

Here is a wild guess: Are interrupts enabled?
If so, are there legal interrupt handlers
for the SCI interrupts?

Actually you should have handlers for ALL possible
interrupts.

Doug
NA1DB

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4. [dsp] 56k EVM clock speed question

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sat, 08 Jul 2000 11:23:42 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95406-2000.07.08-10.28.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello all,

Assuming my EVM will do 80 MHz (yet to be demonstrated), is it as simple as
commenting/un-commenting the appropriate lines in LEONID.ASM file (and
reassembling, etc)? Or are there other files/lines that need to be changed
as well?

```
;------------------------------------------------------------------------------
; Select EVM clock speed
; Some 66MHz parts will run up to 80 MHz
;------------------------------------------------------------------------------
;xtal   equ     32000000        ; 32 MHz for most accurate SCI baudrates
;xtal   equ     40000000        ; 40 MHz for standard EVM
;xtal   equ     66000000        ; 66 MHz for new EVM's !!!NOT DIVISIBLE BY 4!!!
xtal    equ     68000000        ; 68 MHz experimental
;xtal   equ     80000000        ; 80 MHz experimental
```

Thanks,

Mark L. Hammond [N8MH]

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5. [dsp] Re: 56k EVM clock speed question

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sat, 08 Jul 2000 13:45:04 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95411-2000.07.08-12.53.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

As far as I know, yes. Just search all the code for usage of the "xtal"
symbol. The divisors for the SCI clock generator will
be different, but the code should automatically calculate the best values.

Doug
NA1DB

At 11:23 AM 7/8/00 -0400, you wrote:
>Hello all,
>
>Assuming my EVM will do 80 MHz (yet to be demonstrated), is it as simple as commenting/un-commenting the appropriate lines in LEONID.ASM file (and reassembling, etc)? Or are there other files/lines that need to be changed as well?
>
>;---
>; Select EVM clock speed
>; Some 66MHz parts will run up to 80 MHz
>;---
>;xtal   equ   32000000   ; 32 MHz for most accurate SCI baudrates
>;xtal   equ   40000000   ; 40 MHz for standard EVM
>;xtal   equ   66000000   ; 66 MHz for new EVM's !!!NOT DIVISIBLE BY 4!!!
>xtal   equ   68000000   ; 68 MHz experimental
>;xtal   equ   80000000   ; 80 MHz experimental
>
>
>Thanks,
>
>Mark L. Hammond [N8MH]
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
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6. [dsp] Re: 56k EVM clock speed question

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sun, 09 Jul 2000 10:48:41 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95536-2000.07.09-09.53.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

To confirm, it seems the change was only in LEONID.ASM, and my EVM appears
to be running quite happily at 80 MHz.

Furthermore, my EVM/TAPR-RI seems to be doing a pretty good job with UO-36
at 38k4 (thus my interest in running at 80 MHz).

Thanks for the input (and coding ;-),

Mark N8MH

At 01:45 PM 7/8/2000 -0400, you wrote:
>As far as I know, yes. Just search all the code for usage of the "xtal"
>symbol. The divisors for the SCI clock generator will
>be different, but the code should automatically calculate the best values.
>
>Doug
>NA1DB
>
>
>At 11:23 AM 7/8/00 -0400, you wrote:

> >Hello all,
> >
> >Assuming my EVM will do 80 MHz (yet to be demonstrated), is it as simple
> as commenting/un-commenting the appropriate lines in LEONID.ASM file (and
> reassembling, etc)? Or are there other files/lines that need to be
> changed as well?
> >
> >;---
> -----
> >; Select EVM clock speed
> >; Some 66MHz parts will run up to 80 MHz
> >;---
> -----
> >;xtal   equ   32000000   ; 32 MHz for most accurate SCI baudrates
> >;xtal   equ   40000000   ; 40 MHz for standard EVM
> >;xtal   equ   66000000   ; 66 MHz for new EVM's !!!NOT DIVISIBLE
> BY 4!!!
> >xtal   equ   68000000   ; 68 MHz experimental
> >;xtal   equ   80000000   ; 80 MHz experimental
> >
> >
> >Thanks,
> >
> >Mark L. Hammond [N8MH]
> >
> >
> >---
> >You are currently subscribed to dsp as: dougnad@bellatlantic.net
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

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7. [dsp] Re: 56k EVM clock speed question

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sun, 09 Jul 2000 10:56:17 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95537-2000.07.09-10.00.43--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Is the 38k4 decoder using most of the CPU cycles at 66 MHz?
Do you know how much you can reduce the clock speed before the modem
stops working?

Doug
NA1DB

At 10:48 AM 7/9/00 -0400, you wrote:
>To confirm, it seems the change was only in LEONID.ASM, and my EVM appears to be running quite happily
at 80 MHz.
>
>Furthermore, my EVM/TAPR-RI seems to be doing a pretty good job with UO-36 at 38k4 (thus my interest in
 running at 80 MHz).
>
>Thanks for the input (and coding ;-),
>
>Mark N8MH

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8. [dsp] Re: 56k EVM clock speed question

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sun, 09 Jul 2000 11:04:27 -0400

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95538-2000.07.09-10.08.49--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hrm, not sure. I'll plead "appliance operator status"..heh.

Assuming the code has the "overflow" LED turned on (having trouble figuring
that out for sure in the code), I've never seen it light at 68 MHz (or 80
either). Admittedly, my station has trouble hearing much of any bird
because my array is only 7' off the ground! But I did grab over 1.1MB in a
pass yesterday...

If you could help me determine if the "overflow" LED is actually ON, I'll
do some more checking and let you know. I need some more passes,
too! Only one bird that isn't on 100% of visible passes makes testing a
tad slow.

Mark N8MH

At 10:56 AM 7/9/2000 -0400, you wrote:
>Is the 38k4 decoder using most of the CPU cycles at 66 MHz?
>Do you know how much you can reduce the clock speed before the modem
>stops working?
>
>Doug
>NA1DB
>
>
>
>At 10:48 AM 7/9/00 -0400, you wrote:
> >To confirm, it seems the change was only in LEONID.ASM, and my EVM
> appears to be running quite happily at 80 MHz.
> >
> >Furthermore, my EVM/TAPR-RI seems to be doing a pretty good job with
> UO-36 at 38k4 (thus my interest in running at 80 MHz).
> >
> >Thanks for the input (and coding ;-),
> >
> >Mark N8MH
>

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: 56k EVM clock speed question

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sun, 09 Jul 2000 20:20:02 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95583-2000.07.09-19.24.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Unfortunately my satellite antennas are in boxes at
the moment. :-(

Doug

At 11:04 AM 7/9/00 -0400, you wrote:
>Hrm, not sure. I'll plead "appliance operator status"..heh.
>
>Assuming the code has the "overflow" LED turned on (having trouble figuring that out for sure in the
code), I've never seen it light at 68 MHz (or 80 either). Admittedly, my station has trouble hearing
much of any bird because my array is only 7' off the ground! But I did grab over 1.1MB in a pass
yesterday...
>
>If you could help me determine if the "overflow" LED is actually ON, I'll do some more checking and let
 you know. I need some more passes, too! Only one bird that isn't on 100% of visible passes makes
testing a tad slow.
>
>Mark N8MH
>
>
>
>At 10:56 AM 7/9/2000 -0400, you wrote:

>>Is the 38k4 decoder using most of the CPU cycles at 66 MHz?
>>Do you know how much you can reduce the clock speed before the modem
>>stops working?
>>
>>Doug
>>NA1DB
>>
>>
>>
>>At 10:48 AM 7/9/00 -0400, you wrote:
>> >To confirm, it seems the change was only in LEONID.ASM, and my EVM appears to be running quite
happily at 80 MHz.
>> >
>> >Furthermore, my EVM/TAPR-RI seems to be doing a pretty good job with UO-36 at 38k4 (thus my interest
 in running at 80 MHz).
>> >
>> >Thanks for the input (and coding ;-),
>> >
>> >Mark N8MH
>
>
>Mark L. Hammond [N8MH]
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: 56k EVM clock speed question

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 10 Jul 2000 08:52:59 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95660-2000.07.10-07.57.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 08:07 AM 7/10/2000 -0400, you wrote:
>Mark, to turn on the overflow notice, all you have to do it set the
>LoadMonitor flag to 1 and reassemble.

Hi Alan,

Yes, I finally figured that out. I moved around which LED does what a bit,
and I think I can see what is going on. One thing I did was add back the
blinking COP LED, so I moved that amongst other ones, too.

>It should trigger one of either the up or the down led in the "status" area
>of the evm if it determines that it ran out of bandwidth. I've never seen
>it at 68 and I'm sure you won't see it at 80. I'd be curious if you decide

Okay, that confirms what I've been seeing. I might get some time this week
and drop it down to 40 MHz to see if it overruns. If we can do 38k4 @ 40
MMz, maybe we can do 76k8 @ 80 MHz :-) Don't know how proportional the
code is....but it's fun to consider.

>to experiment to see if you get it at speeds lower than 68.
>
>BTW, just happened to see your dialog with Doug on the dsp list.
>
>Alan

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Power up LEDs?

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Mon, 10 Jul 2000 13:26:49 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95662-2000.07.10-08.31.27--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

Hi,

After a long delay I am just getting around to testing my TAPR 56k RI.
Completely pristine, never been programmed. At power up, should the COP led
normally be on?   Just wanted to check before I start looking for a bad
driver transistor.

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: Power up LEDs?

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 10 Jul 2000 09:38:04 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95663-2000.07.10-08.42.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

That depends :-)

If you are using the version of BIOS2.ASM that you send me (the ones with
the 56k serial speed fix), it is disabled. You can re-enable it by
searching for these lines, and uncommenting out the "copled" line (remove
the pair of ;; like this:

from BIOS2.ASM--
;
; $Header: C:\\ham\\evm/RCS/bios2.asm 1.26 1999/04/07 17:47:46 dbraun Exp $
;

//

; if so, update the LED and the watch-dog interval counter
         ;N1OWU: Skip this; there are better things to do with this
LED--turned it BACK ON--mlh 7/7/2000 N8MH
         copled chg

That makes for a "blinking" COP in the g3ruh modem, but the g38kruh modem
takes some moving of LED function so it works (seems like COP which is bit
14 is used by another part of that code, too). I moved that function to
another LED and the g38kruh modem flashes the COP led now, too.

Oh--wait a minute--have you flashed the EEPROM and have a modem
running? That is required for the COP to flash (if enabled...)

73,

Mark N8MH

At 01:26 PM 7/10/2000 +0000, you wrote:
>Hi,
>
>After a long delay I am just getting around to testing my TAPR 56k RI.
>Completely pristine, never been programmed. At power up, should the COP led
>normally be on?   Just wanted to check before I start looking for a bad
>driver transistor.
>
>
>Alan
>WA4SCA
>
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Re: Power up LEDs?

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 10 Jul 2000 09:45:52 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95664-2000.07.10-08.50.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Okay, I have a short between the ears....I read the first name "Alan" and
didn't realize that you are a different Alan than the one that sent me the
EVM code for 38k4...sorry!

In any event, a flashing COP requires the EVM to be running a modem that
supports it (g3ruh for example) with a version of BIOS2.ASM that has that
function enabled.

Sorry for the confusion...

73,

Mark N8MH

At 09:38 AM 7/10/2000 -0400, you wrote:
>That depends :-)
>
>If you are using the version of BIOS2.ASM that you send me (the ones with
>the 56k serial speed fix), it is disabled. You can re-enable it by
>searching for these lines, and uncommenting out the "copled" line (remove
>the pair of ;; like this:
>
>from BIOS2.ASM--
>;
>; $Header: C:\\ham\\evm/RCS/bios2.asm 1.26 1999/04/07 17:47:46 dbraun Exp $
>;
>
>//
>
>; if so, update the LED and the watch-dog interval counter
>   ;N1OWU: Skip this; there are better things to do with this
> LED--turned it BACK ON--mlh 7/7/2000 N8MH
>   copled chg
>
>
>---------
>That makes for a "blinking" COP in the g3ruh modem, but the g38kruh modem
>takes some moving of LED function so it works (seems like COP which is bit
>14 is used by another part of that code, too). I moved that function to
>another LED and the g38kruh modem flashes the COP led now, too.
>
>Oh--wait a minute--have you flashed the EEPROM and have a modem
>running? That is required for the COP to flash (if enabled...)
>
>73,
>
>Mark N8MH
>
>
>At 01:26 PM 7/10/2000 +0000, you wrote:
>>Hi,
>>
>>After a long delay I am just getting around to testing my TAPR 56k RI.
>>Completely pristine, never been programmed. At power up, should the COP led
>>normally be on?   Just wanted to check before I start looking for a bad
>>driver transistor.
>>
>>
>>Alan
>>WA4SCA

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] Re: Power up LEDs?

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Mon, 10 Jul 2000 13:53:48 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95665-2000.07.10-08.58.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Mark,

>If you are using the version of BIOS2.ASM that you send me (the ones with
>the 56k serial speed fix), it is disabled. You can re-enable it by
>searching for these lines, and uncommenting out the "copled" line (remove
>the pair of ;; like this:

Not me. Must be another Alan.

Again, pristine, never been programmed. Just tested with the Motorola test
program.

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] Re: Power up LEDs?

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 10 Jul 2000 10:13:47 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95668-2000.07.10-09.18.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

All the LEDs (apart from the power one) are software-controlled.
So if no software is loaded, none of them will really do anything.
As far as I know, none of the Motorola software knows anything
about the LEDs It predates them).

Doug

At 01:53 PM 7/10/00 +0000, you wrote:
>Mark,
>
> >If you are using the version of BIOS2.ASM that you send me (the ones with
> >the 56k serial speed fix), it is disabled. You can re-enable it by
> >searching for these lines, and uncommenting out the "copled" line (remove
> >the pair of ;; like this:
>
>Not me. Must be another Alan.
>
>Again, pristine, never been programmed. Just tested with the Motorola test
>program.
>
>Alan
>WA4SCA
>
>
>
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: Power up LEDs?

From: "Josh" <skarch@techst02.technion.ac.il>
Date: Mon, 10 Jul 2000 11:33:58 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95676-2000.07.10-09.36.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello, what board are you referring to?

Josh Karch

-----Original Message-----
From: bounce-dsp-18659@lists.tapr.org
[mailto:bounce-dsp-18659@lists.tapr.org]On Behalf Of Alan Biddle
Sent: Monday, July 10, 2000 3:54 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Re: Power up LEDs?

Mark,

>If you are using the version of BIOS2.ASM that you send me (the ones with
>the 56k serial speed fix), it is disabled. You can re-enable it by
>searching for these lines, and uncommenting out the "copled" line (remove
>the pair of ;; like this:

Not me. Must be another Alan.

Again, pristine, never been programmed. Just tested with the Motorola test
program.

Alan
WA4SCA

You are currently subscribed to dsp as: skarch@techst02.technion.ac.il
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] Re: Power up LEDs?

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 10 Jul 2000 11:09:45 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95690-2000.07.10-10.14.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Alan,

Be sure to grab this document:

ftp://ftp.tapr.org/dsp/Motorola/dsp56002/evm56k/TAPR_evmri/OpManDraft_04.pdf

I think it will get you up and going. Look that over, and feel free to ask
any questions that come up. I'm a molecular biologist, so if I can figure
it out, anybody can :)

73,

Mark N8MH

At 01:53 PM 7/10/2000 +0000, you wrote:
>Mark,
>
> >If you are using the version of BIOS2.ASM that you send me (the ones with
> >the 56k serial speed fix), it is disabled. You can re-enable it by
> >searching for these lines, and uncommenting out the "copled" line (remove
> >the pair of ;; like this:
>
>Not me. Must be another Alan.
>
>Again, pristine, never been programmed. Just tested with the Motorola test
>program.
>

>Alan
>WA4SCA
>
>
>
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] Re: Power up LEDs?

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 10 Jul 2000 11:10:34 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95691-2000.07.10-10.15.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

This one, Josh--

http://www.tapr.org/tapr/html/Fevmri.html

Nice kit to interface your EVM with radios...

73,

Mark N8MH

At 11:33 AM 7/10/2000 +0200, you wrote:
>Hello, what board are you referring to?
>
>Josh Karch
>
>-----Original Message-----
>From: bounce-dsp-18659@lists.tapr.org
>[mailto:bounce-dsp-18659@lists.tapr.org]On Behalf Of Alan Biddle
>Sent: Monday, July 10, 2000 3:54 PM
>To: TAPR DSP Special Interest Group
>Subject: [dsp] Re: Power up LEDs?
>
>
>Mark,
>
> >If you are using the version of BIOS2.ASM that you send me (the ones with
> >the 56k serial speed fix), it is disabled. You can re-enable it by
> >searching for these lines, and uncommenting out the "copled" line (remove
> >the pair of ;; like this:
>
>Not me. Must be another Alan.
>
>Again, pristine, never been programmed. Just tested with the Motorola test
>program.
>
>Alan
>WA4SCA
>
>
>
>
>
>---
>You are currently subscribed to dsp as: skarch@techst02.technion.ac.il
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: Power up LEDs?

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Mon, 10 Jul 2000 20:18:16 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95718-2000.07.10-15.24.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Mark,

It would seem that everybody who has built this kit must have powered it up
for the first time before they had done anything with it, except perhaps for
a few who had been using the board alone before. So was that a yes it
should be on, or no, it should be off? :) !

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] Re: Power up LEDs?

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 10 Jul 2000 16:25:40 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95719-2000.07.10-15.30.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Alan,

I was a beta tester for the RI kit, so it's been way too long for me to
even remember :) And, I had been running my EVM on a homebrew radio
interface before that...so....

Sorry for the lack of a simple answer.

Mark

At 08:18 PM 7/10/2000 +0000, you wrote:
>Mark,
>
>It would seem that everybody who has built this kit must have powered it up
>for the first time before they had done anything with it, except perhaps for
>a few who had been using the board alone before. So was that a yes it
>should be on, or no, it should be off? :) !
>
>Alan
>WA4SCA
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] WTB DSP56002EVM

From: Murray Scott <ke8um@flash.net>
Date: Mon, 10 Jul 2000 17:55:19 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95730-2000.07.10-16.59.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am looking for a DSP56002EVM for my TAPR Radio Interface.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

22. [dsp] Re: 56002 SCI EVM nightmares

From: "Josh" <skarch@techst02.technion.ac.il>
Date: Fri, 7 Jul 2000 20:23:24 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95748-2000.07.10-20.23.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

I think in the code I masked all interrupts with that instruction
ORI #3,MR

Does this turn off interrupts? Also, what are handlers? I am new to 56k asm. I have been working with hc11/12 units for a long time--these are easy to use by comparison. I wish I could find a simple program that inputs a string of text on command, and then also prints text. This program that I tried to write looks for an enter key $13 to determine the end of string while printing. The wierd problem is that the output of the srx register is always $FF no matter what happens. Therefore, no string is properly received. Is there some generalized initialization code that should be used for most non-interrupt driven programs that I should know about? what should I do with the interrupt vectors? How do I create interrupt handlers, are these routines that you fill in at the address of each interrupt vector? Is it possible that there is a defect with my board if it works sometimes and doesn't at other times, or is it some simple register that I forgot to program that a previously working program might have handled?

I appreciate all the help I can get on this. If someone has an SCI routine, interrupt driven or not, packed bytes or not, I would greatly appreciate all of the help I can get.

In order to program the SCI, what are the things I need to know to make it work? I think I may be missing an important line or two from the standalone program that I wrote.

Thank you for your assistance,

Sincerely,

Joshua Karch

-----Original Message-----
From: bounce-dsp-18659@lists.tapr.org
[mailto:bounce-dsp-18659@lists.tapr.org]On Behalf Of Douglas Braun & Nadia Papakonstantinou
Sent: Friday, July 07, 2000 11:08 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Re: 56002 SCI EVM nightmares

Here is a wild guess: Are interrupts enabled?
If so, are there legal interrupt handlers
for the SCI interrupts?

Actually you should have handlers for ALL possible
interrupts.

Doug
NA1DB

You are currently subscribed to dsp as: jpk1@cec.wustl.edu
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: publicidad01@uole.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] ARRL and TAPR 19th Annual Digital Communications Conference

From: "Steven R. Bible" <srbible@gate.net>
Date: Wed, 19 Jul 2000 11:12:23 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-97401-2000.07.19-10.17.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

ARRL and TAPR 19th Annual
Digital Communications Conference
September 22-24, 2000 - Orlando, Florida

For more information see: http://www.tapr.org/dcc

Information
Mark your calendar and start making plans to attend the year's premier event in digital communications. The 19th Annual ARRL and TAPR Digital Communications Conference will be held September 22-24, 2000, in Orlando, Florida - just minutes from the Orlando International Airport.

The ARRL and TAPR Digital Communications Conference is an international forum for radio amateurs in digital communications, networking, and related technologies to meet, publish their work, and present new ideas and techniques for discussion. Presenters and attendees will have the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results, and practical applications. The Digital Communications Conference is not just for the digital expert, but also for digitally oriented amateurs of all levels of experience.

A Conference for the Beginner as well
The conference is not just for the digital expert. As in years past an entire session strand with beginning, intermediate, and advanced presentations on selected topics in digital communications will be offered. Some of the topics will include: APRS, Satellite Communications, TCP/IP, Digital Radio, Spread Spectrum and other introductory topics. Come to the conference and hear these topics presented by the experts!

Area Attractions
The Orlando Florida area is famous for its attractions and vacation spots. Disney World, Universal Studios, and Sea World (just to name a few) are within 15 minutes of the hotel. Shuttle service from the hotel will be available for a small fee. Cape Canaveral and Cocoa Beach are a 30 minute drive East of the hotel.

Symposia, Seminars and Banquet
Two symposia/seminars will be held which allow those with additional time and interest to make the most of the Conference. For those who may have interest in just one symposium or seminar, registration for the conference is not required to attend these activities. This allows maximum flexibility for those who may want to participate during the Digital Communications Conference, but do not have an entire weekend to devote to the event.

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Co-Hosts
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hosts will be Lake Monroe Amateur Radio Society
(http://www.qsl.net/lmars/),Orange County
ARES/RACES(http://evcom.net/~jvoisin/ares.htm), Seminole County
ARES/RACES (http://wwww.geocities.com/capecanaveral/launchpad/4773),
and Orlando Amateur Radio Club(http://www.oarc.org/).

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Maty Weinberg, ARRL
225 Main Street
Newington, CT 06111

or via the Internet to

   lweinberg@arrl.org

Information on paper submission guidelines are available on-line at

   http://www.tapr.org/dcc

Hotel
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Orlando Airport Marriott. It is highly recommended that you book your
room prior to arriving. A special DCC room rate of $89/single and
$89/double per night has been blocked for 50 rooms and is available
until September 1st, 2000. Once the 50 rooms have been reserved, room
rates will increase. So be sure to book your rooms early! The hotel
provides transportation to and from the Orlando International Airport.
Please contact the hotel to arrange specific transportation needs.

Orlando Airport Marriott (conference hotel)
7499 Augusta Drive
Orlando, FL 32822
Phone 407-851-9000, Fax 407-857-6211
(http://marriotthotels.com/MCOAP/)

What you can expect at DCC 2000
- A full day of papers and breakouts for the beginner to the advanced
- Two seminars/symposiums
- The fifth annual Student Paper session.
- A banquet with Special Guest Speaker.
- Informal get-togethers throughout the weekend.
- TAPR Membership Meeting
- An event at which the most important new developments in amateur
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- Digital 'movers and shakers' from all over the world in attendance.

There are few activities where your participation can be so much fun
and important! What a great way to share and renew your enthusiasm for
digital amateur radio! A get-together with colleagues and bringing
each other up to date on your latest work -- all this, and more, for
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We hope to see you at the ARRL and TAPR Digital Communications
Conference on September 22-24, 2000!

Full information on the conference and hotel information can be
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Tucson Amateur Packet Radio
Phone: (940) 383-0000.
Fax: (940) 566-2544
Email: tapr@tapr.org
Web: http://www.tapr.org

Registration Form
Contact the TAPR office by Phone 940-383-0000, Fax 940-566-2544, or
Internet: http://www.tapr.org and tapr@tapr.org to register or for
additional information.

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text form for mailing or faxing.

A registration packet will be mailed in September upon receipt of
registration form and payment.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

24. [dsp] Looking for polynomials

From: "Nino Porcino" <ninopo@tin.it>
Date: Wed, 19 Jul 2000 19:39:25 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-97424-2000.07.19-12.47.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

I'm looking for generator polynomials for a covolutional encoder - does
anyone have a complete list? I already have some with K=7, K=9, and would
try K=11 and K=15. I would also like to try different values of R (i.e.
R=1/3, R=1/4, R=1/10). Any help is really appreciated

Regards,

- Nino IZ8BLY

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] Re: Looking for polynomials

From: "Stephan Isebeck" <stephan@parsec.co.za>
Date: Fri, 21 Jul 2000 08:32:14 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-97759-2000.07.21-01.25.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Nino

Stephan is out of his office until Friday, 28 July. He will reply to your
request then. I hope that this is in order.
Regards
Elena

-----Original Message-----
From: Nino Porcino <ninopo@tin.it>
To: TAPR DSP Special Interest Group <dsp@lists.tapr.org>
Date: Wednesday, July 19, 2000 7:46 PM
Subject: [dsp] Looking for polynomials

>Hello,
>
>I'm looking for generator polynomials for a covolutional encoder - does
>anyone have a complete list? I already have some with K=7, K=9, and would
>try K=11 and K=15. I would also like to try different values of R (i.e.
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>
>Regards,
>
>- Nino IZ8BLY
>
>
>---
>You are currently subscribed to dsp as: stephan@parsec.co.za
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] Re: Looking for polynomials

From: Robert McGwier <rwmcgwier@home.com>
Date: Fri, 21 Jul 2000 07:09:48 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-97768-2000.07.21-06.14.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Nino:

Phil has done a great job with teaching all of us how to
do FEC. I suggest you follow this link. In the convolutional
decoding section you will find a piece of "generic" viterbi
code that has a ton of polynomials in it. He also has a sequential
decoder (fano) for the longer polynomials. BE ADVISED, there
are some manufacturers that use systematic codes. Where one
of the polynomials is the identity so that one of the transmitted
symbols is the actual data. Phil's decoders do not work on these
codes. These codes usually stink anyway (unless part of a
turbo coding process ;-).

http://people.qualcomm.com/karn/code/fec/

Bob

At 02:32 AM 07/21/2000 Friday, Stephan Isebeck wrote:
>Hi Nino
>
>Stephan is out of his office until Friday, 28 July. He will reply to your
>request then. I hope that this is in order.
>Regards
>Elena
>
>-----Original Message-----
>From: Nino Porcino <ninopo@tin.it>
>To: TAPR DSP Special Interest Group <dsp@lists.tapr.org>
>Date: Wednesday, July 19, 2000 7:46 PM
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>
>
> >Hello,
> >
> >I'm looking for generator polynomials for a covolutional encoder - does
> >anyone have a complete list? I already have some with K=7, K=9, and would
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> >R=1/3, R=1/4, R=1/10). Any help is really appreciated
> >
> >Regards,
> >
> >- Nino IZ8BLY
> >
> >
> >---
> >You are currently subscribed to dsp as: stephan@parsec.co.za
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
>
>
>---
>You are currently subscribed to dsp as: RWMCGWIER@HOME.COM
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

27. [dsp] R: Re: Looking for polynomials

From: "Nino Porcino" <porcino@sysonline.it>
Date: Fri, 21 Jul 2000 17:50:21 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-97798-2000.07.21-10.57.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Bob wrote:

> Phil has done a great job with teaching all of us how to
> do FEC. I suggest you follow this link. In the convolutional
> decoding section you will find a piece of "generic" viterbi
> code that has a ton of polynomials in it.

you are right! Phil has done a very good work, infact I've started my
experience in the codes field by reading his "tutorial" ! Actually his
"generic" Viterbi decoder is featured in one of my soundcard-based programs
and it will be part of the new MFSK amateur mode being developed nowdays
(further info on www.qsl.net/zl1bpu/MFSK).

The problem with the polynomials is that I need a large set of them where to
choose from, i.e. for building a very strong modem with high redundancy.

Regards,
- Nino (IZ8BLY)

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28. [dsp] Re: R: Re: Looking for polynomials

From: Robert McGwier <rwmcgwier@home.com>
Date: Fri, 21 Jul 2000 12:27:20 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-97803-2000.07.21-11.32.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Then use the fano decoder and a very long polynomial. Otherwise,
use an IBS and the viterbi decoder. All of this is pretty straightforward.
A large part of the power of the code on HF comes from permuting the
order and breaking up patches of burst errors. HF was way ahead of
"turbo" coders in this.   (See Mil-Std-188-110A).

Bob

At 11:50 AM 07/21/2000 Friday, you wrote:
>Bob wrote:
>
> > Phil has done a great job with teaching all of us how to
> > do FEC. I suggest you follow this link. In the convolutional
> > decoding section you will find a piece of "generic" viterbi
> > code that has a ton of polynomials in it.
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>The problem with the polynomials is that I need a large set of them where to
>choose from, i.e. for building a very strong modem with high redundancy.
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>Regards,
>- Nino (IZ8BLY)
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>
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---
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29. [dsp] Re: R: Re: Looking for polynomials

From: Johan Forrer <forrerj@peak.org>
Date: Fri, 21 Jul 2000 11:27:43 -0700 (PDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-97821-2000.07.21-13.32.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Nino,

Interesting explorations ... a few suggestions for what it's worth:

1. You should definately look at Turbo Codes. Use your web browser's
search engine and look for "Turbo codes". There are source code on the
net, also papers on what folks have already achieved using it on HF.

2. Merely increasing code strength might not always produce the desired
results. You might be dissapointed, but you'll have to find that out
yourself :)

3. Think about adding more sophisticated syncronization and bit tracking
to increase reliability of bit estimates. For example, there are clever
techniques using Viterbi decoders for doing optimal clock recovery in
fluttery signal conditions. Throwing ECC at fixing weakish clock for frame
sync routines are not always good idea. The big hammer does not always do
the trick :)

4. Have a critical look at dynamic range issues associated with FFT
engines. You might be surprised :)

5. Be aware (I am sure you are) that nearly each type of HF condition
has some optimal requirement that will do best for it's particular fading
rate, multipath, and impulse noise. Ideally, this will represent a whole
range of algorithmic approaches.

I have seen results where folks have, for example, played with nested
convolutional and block codes, varying interleave length and coding
strengths and shown that the outcome is cyclic, i.e., for a certain HF
condition, you will see your BER improve as you strengthen coding,
only to see it getting worse with more coding, but then again improve as
you continue strengthening. Unfortunately, when you change HF conditions,
the apparent cyclic behavior also changes accordingly. It's a tough one!

This effect is not uncommon when dealing with a situation that are trying
to optimise in a multi-dimensional variable space and encounter suboptimal
valleys, ridges, or wells. There generally are no "one size fits all"
solution. Either you are into adaptive systems, or you choose a good
middle-of-the-road approach --- HF is just too rich in charateristics
across the 30MHz-0.5MHz range. A lot of fun ahead?

A lot can be said for doing your homework with channel probing. A clever
ALE system can help in this regard. As an aside, look out for an
upcoming paper by Peter Martinez on the use of chirp sounders (in an
upcoming issue of RSGB's RADCOM)... how this free resource, and simple
software can tell you much about prevailing HF conditions, and perhaps how
you can use that to help choose appropriate signal processing strategy.

Good luck! Keep up the good work.

73,

Johan, KC7WW

On Fri, 21 Jul 2000, Robert McGwier wrote:

> Then use the fano decoder and a very long polynomial. Otherwise,
> use an IBS and the viterbi decoder. All of this is pretty straightforward.
> A large part of the power of the code on HF comes from permuting the
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> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
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You are currently subscribed to dsp as: lyris.dsp@tapr.org
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30. [dsp] PMP (and EVM) for 56k serial port speed

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Tue, 25 Jul 2000 12:15:32 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-98427-2000.07.25-11.20.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello all,

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from working at a 57600 serial port speed.
If you want to give the fixed version a try, let me know.
I will update my Web site sometime soon.

The same bug affects dl.exe and spy.exe, and
I will fix these, too. (Actually, these
have a hard-coded 19200 rate, and I will make it settable).

There are also a couple of very minor fixed to bios2.asm
to make it work properly at 57600 baud.

Stay tuned.

Doug Braun
NA1DB

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

31. [dsp] ANNOUNCEMENT: ARRL and TAPR 19th Annual Digital Communications Conference

From: "Steven R. Bible" <srbible@gate.net>
Date: Wed, 26 Jul 2000 13:36:33 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-98604-2000.07.26-12.43.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

ARRL and TAPR 19th Annual
Digital Communications Conference
September 22-24, 2000 - Orlando, Florida

For more information see: http://www.tapr.org/dcc

Information
Mark your calendar and start making plans to attend the year's premier
event in digital communications. The 19th Annual ARRL and TAPR
Digital Communications Conference will be held September 22-24, 2000,
in Orlando, Florida - just minutes from the Orlando International
Airport.

The ARRL and TAPR Digital Communications Conference is an international forum for radio amateurs in digital communications, networking, and related technologies to meet, publish their work, and present new ideas and techniques for discussion. Presenters and attendees will have the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results, and practical applications. The Digital Communications Conference is not just for the digital expert, but also for digitally oriented amateurs of all levels of experience.

A Conference for the Beginner as well
The conference is not just for the digital expert. As in years past an entire session strand with beginning, intermediate, and advanced presentations on selected topics in digital communications will be offered. Some of the topics will include: APRS, Satellite Communications, TCP/IP, Digital Radio, Spread Spectrum and other introductory topics. Come to the conference and hear these topics presented by the experts!

Area Attractions
The Orlando Florida area is famous for its attractions and vacation spots. Disney World, Universal Studios, and Sea World (just to name a few) are within 15 minutes of the hotel. Shuttle service from the hotel will be available for a small fee. Cape Canaveral and Cocoa Beach are a 30 minute drive East of the hotel.

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Maty Weinberg, ARRL
225 Main Street

Newington, CT 06111

or via the Internet to

   lweinberg@arrl.org

Information on paper submission guidelines are available on-line at

   http://www.tapr.org/dcc

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Please contact the hotel to arrange specific transportation needs.

Orlando Airport Marriott (conference hotel)
7499 Augusta Drive
Orlando, FL 32822
Phone 407-851-9000, Fax 407-857-6211
(http://marriotthotels.com/MCOAP/)

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- A full day of papers and breakouts for the beginner to the advanced
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- The fifth annual Student Paper session.
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- An event at which the most important new developments in amateur
  digital communications are announced.
- Digital 'movers and shakers' from all over the world in attendance.

There are few activities where your participation can be so much fun
and important! What a great way to share and renew your enthusiasm for
digital amateur radio! A get-together with colleagues and bringing
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an unforgettable weekend of amateur radio and digital communications.
We hope to see you at the ARRL and TAPR Digital Communications
Conference on September 22-24, 2000!

Full information on the conference and hotel information can be
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Tucson Amateur Packet Radio
Phone: (940) 383-0000.
Fax: (940) 566-2544
Email: tapr@tapr.org
Web: http://www.tapr.org

Registration Form
Contact the TAPR office by Phone 940-383-0000, Fax 940-566-2544, or
Internet: http://www.tapr.org and tapr@tapr.org to register or for
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See http://www.tapr.org/dcc for an on-line registration form or
text form for mailing or faxing.

A registration packet will be mailed in September upon receipt of
registration form and payment.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

32. [dsp] Re: PMP (and EVM) for 56k serial port speed

From: "Pat McGrath" <patricio@cyberg8t.com>
Date: Wed, 26 Jul 2000 20:43:23 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-98703-2000.07.26-22.48.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Congrats Doug. I always liked to use pmp.exe

Please tell me how I can access the fixed version.

----- Original Message -----
From: "Douglas Braun & Nadia Papakonstantinou" <dougnad@bellatlantic.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, July 25, 2000 9:15 AM
Subject: [dsp] PMP (and EVM) for 56k serial port speed

> Hello all,
>
> I found and fixed a bug in pmp.exe that kept it
> from working at a 57600 serial port speed.
> If you want to give the fixed version a try, let me know.
> I will update my Web site sometime soon.
>
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> have a hard-coded 19200 rate, and I will make it settable).
>
> There are also a couple of very minor fixed to bios2.asm
> to make it work properly at 57600 baud.
>
> Stay tuned.
>
> Doug Braun
> NA1DB
>
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

33. [dsp] Re: PMP (and EVM) for 56k serial port speed

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 27 Jul 2000 09:14:45 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-98767-2000.07.27-08.20.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Here is the new pmp.exe. As soon as I get a chance, I'll
update my Web site with the full package (source code, etc.).

Doug

At 08:43 PM 7/26/00 -0700, you wrote:
>Congrats Doug. I always liked to use pmp.exe
>
>Please tell me how I can access the fixed version.
[Attachment: pmp56.zip; application/zip; 31,237 bytes]

34. [dsp] Re: PMP (and EVM) for 56k serial port speed

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 27 Jul 2000 09:21:26 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-98768-2000.07.27-08.26.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Oops, I didn't mean to email a bit
attachment to the entire list!

Doug

At 09:14 AM 7/27/00 -0400, you wrote:
>Here is the new pmp.exe. As soon as I get a chance, I'll
>update my Web site with the full package (source code, etc.).

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

35. [dsp] Spectran beta 4 is released

From: Alberto di Bene <dibene@usa.net>
Date: Mon, 31 Jul 2000 11:42:29 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-99551-2000.07.31-04.49.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

SPECTRAN beta 4, build 110 has been just released.

Beta 4 is a major enhancement with respect to beta 3.
Full duplex, real time audio processing has been added,
with denoising, bandpassing and CW peaking functions.

Here are some of the new features :

- Display of the frequency where the mouse cursor is hovering on.

- Possibility to switch off the visual AGC (not the audio AGC, but
  that AGC that in beta 3 was always applied when computing the
  color of the spectrogram). It has been brought to our attention that
  with strong QRN this AGC had the side effect of 'chopping' otherwise
  quite readable QRSS signals, making difficult to discriminate
  between dots and lines.

- More consistent timing when computing the overlap factor, leading
  to a more constant speed of the spectrogram.

- Semiautomatic procedure for the setting of the Windows mixer.
  The Windows mixer is the most non-standard feature of Win9x,
  a real nightmare (thanks Bill...). Lacking tight specifications,
  every soundcard manufacturer has felt free to implement the mixer
  functions in the way they pleased them more. Hopefully the procedure
  we have devised to set the mixer should take care of this.

- Denoiser : the denoiser is of the Widrow-Hoff type, i.e. a FIR filter
  whose h coefficients are adjusted in real time with the LMS (Least Mean
  Square) algorithm, making the filter to converge towards a dynamic
  solution that minimizes the so-called AWGN noise. We have devised a
  variant of the standard method, where the leaking factor applied to the
  h coefficients has been made proportional to the mean amplitude of the
  audio signal.

- Bandpass : from the low-cut and high-cut limits set with the mouse a
  rectangular windows is defined, its IFFT is computed, then a Hamming
  window is applied to it, and finally a forward FFT is computed, leading
  to a 'well-shaped' filtering window that minimizes the Gibbs phenomenon.
  This window is applied to the FFT of the audio signal, which is then
  brought again in the time domain with an IFFT, ready for further processing.
  You can see a simulation done with Matlab of the final result at this
  URL : http://www.weaksignals.com/images/bandpass.gif
  The irregularities seen on the stop band are due to the simulation of
  rounding the coefficients to 5 significant digits.

- CW Peaking : this function is simply an IIR resonator, with two zeros
  on the real axis at -1 and 1, and two complex conjugate poles at a radius
  of 0.995. The angle of the poles is computed in real time, when the frequency
  of the desired peak is set with the mouse. This kind of resonator has been
  choosen by personal judgement, listening to its effect on CW signals. We
  feel that its shape is much more adequate for CW than a 'brick-wall' filter,
  even if the stop-band rejection could be better. But you can always use the
  CW peak filter and the bandpass filter in cascade, if you so prefer. For those
  wanting to see the interesting shape of this filter, there is another
  Matlab simulation here : http://www.weaksignals.com/images/cwpeak.gif
  A word of warning : the bandpass of this filter is roughly 30 Hz, so if used
  with very fast CW it could smooth a bit too much the keying component.

These more or less are the major enhancements of beta 4. Only a few final words
on how to use them. For the mixer setting, Spectran will recognize the first
execution of beta 4 on a given machine, and will automatically start the setup
procedure. Just follow the simple instructions on the screen, and you will not
be bothered again.
To set the filters, a filter definition panel has been added. If you briefly tap

on either Shift key, the panel will appear. Another tap on the Shift key, and it
will disappear. When it is visible, the left mouse button will set the lower limit
of the bandpass, the right mouse button the upper limit. To set the CW peak frequency,
use the combination Ctrl-Left Mouse Button.
To actually switch the filters on and off the audio processing chain, use the red leds
on the left side of the main Spectran panel. If you want to use them all
simultaneously, you need at least a 166 MHz Pentium if you limit the sampling
frequency to 11025 Hz. For 22050 Hz a 266 MHz Pentium should do.
The 'PassThru' led, when choosen, simply activates the rerouting of the input
signal, unprocessed, to the output. In this mode the signal does not incur in the
delay of about one second between input and output, due to the buffering and
processing. It is intended to make tuning easier (which it isn't with the delay...)

This should be all. Sorry for the long message, but a bit of explanations were in
order. One last thing : we need your feedback. We 'think' our mixer setting
procedure should take care of all the possible variations around (it did in our
few test cases), but there is always a case you did not anticipate... so please
tell us how it works on your computer with your soundcard. Thanks.

Spectran beta 4 is freely available here : http:/www.weaksignals.com

73

Alberto I2PHD
Vittorio IK2CZL

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

August 2000

Original source file: dsp.0008
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0008

1. [dsp] Spectran beta 4

From: Alberto di Bene <dibene@usa.net>
Date: Tue, 01 Aug 2000 16:25:31 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-99814-2000.08.01-09.33.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi all,
this message is sent to all the reflectors where originally I sent
the announcement of the beta 4 version of Spectran.

While some of the users have been able to have it run correctly, the greatest
part is having problems with the semi-automatic mixer setting procedure.
Vittorio and I are investigating on the possible causes of those problems,
and probably we will produce some debug ad-interim versions that will
help us to better diagnose what happened.

For this we are asking for a number of volunteers to run those debug pgms.
If you are willing to volunteer for this, please contact us. We expect that
the vounteers be proficient with manually setting the Windows mixer, to
reset it from a probable bad state those tests will leave it.

Should we be not able in the end to fix this problem, then we will distribute
another build of Spectran that will not rely on the programmatical setting
of the mixer, though this will mean to renounce to the possibility of the
PassThrough done with a simple mouse click, and the need of manually
setting the mixer before running Spectran.

Thanks for your cooperation

Alberto I2PHD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: EVM spur... (DSP)

From: "Pat McGrath" <pat_mcgrath@yahoo.com>
Date: Fri, 11 Aug 2000 19:21:08 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102235-2000.08.11-21.51.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

What was the solution to this problem?

----- Original Message -----
From: "Douglas Braun" <doug.braun@intel.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, November 23, 1999 8:23 AM
Subject: [dsp] Re: EVM spur... (DSP)

> I see a frequency of 144,389,530 Hz, plus or minus 50Hz or so.
> And I can pick up the fundamental at 3.072130 MHz.
> This seems to be 8th submultiple of the 24.576 CODEC xtal freq.
> I can pick up the 24.576 frequency too, but for some reason
> it is a lot weaker than the 3.072...
>
> This is all strange, because all the circuitry that uses these freqs
> is supposed to be contained within the CODEC chip. Possibly
> the analog ground of the EVM is noisy, so bypassing the audio signals
> to it does not help. I may try putting capacitors right on the DIN
> connectors on the back panel of my (homebrew) enclosure.
>
> Doug
> NA1DB
>
> At 07:52 AM 11/23/99 , you wrote:
> >Hi Dough,
> >   I have been posting to the DSP List but something is preventing
my

> >messages from being reflected.
> >   All I wanted to make known is that the 144.39 spur is repeated
every
> >3.072MHz, I could not find other harmonics so I suppose 3.072MHz is the
> >fundamental. The 47th. harm. just falls very near the APRS freq. (should
> >be 144.384) and its brothers extend well above 400MHz!!.
> >   Now, what is clocking at 3.072MHz into the EVM?
> >
> >   73 de Nando, CX6DD.
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Help!

From: "Pat McGrath" <pat_mcgrath@yahoo.com>
Date: Fri, 11 Aug 2000 18:18:11 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102239-2000.08.11-22.27.09--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Help

How do you change the email address on this sig?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: EVM spur... (DSP)

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Fri, 11 Aug 2000 23:42:41 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102241-2000.08.11-22.48.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I never really solved it... :-(

Doug

At 07:21 PM 8/11/00 -0700, you wrote:
>What was the solution to this problem?
>
>
>----- Original Message -----
>From: "Douglas Braun" <doug.braun@intel.com>
>To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>Sent: Tuesday, November 23, 1999 8:23 AM
>Subject: [dsp] Re: EVM spur... (DSP)
>
>
> > I see a frequency of 144,389,530 Hz, plus or minus 50Hz or so.
> > And I can pick up the fundamental at 3.072130 MHz.
> > This seems to be 8th submultiple of the 24.576 CODEC xtal freq.
> > I can pick up the 24.576 frequency too, but for some reason
> > it is a lot weaker than the 3.072...
> >
> > This is all strange, because all the circuitry that uses these freqs
> > is supposed to be contained within the CODEC chip. Possibly
> > the analog ground of the EVM is noisy, so bypassing the audio signals
> > to it does not help. I may try putting capacitors right on the DIN
> > connectors on the back panel of my (homebrew) enclosure.
> >
> > Doug
> > NA1DB
> >
> > At 07:52 AM 11/23/99 , you wrote:
> > >Hi Dough,
> > >   I have been posting to the DSP List but something is preventing
>my
> > >messages from being reflected.
> > >   All I wanted to make known is that the 144.39 spur is repeated
>every
> > >3.072MHz, I could not find other harmonics so I suppose 3.072MHz is the
> > >fundamental. The 47th. harm. just falls very near the APRS freq. (should

> > >be 144.384) and its brothers extend well above 400MHz!!.
> > >   Now, what is clocking at 3.072MHz into the EVM?
> > >
> > >   73 de Nando, CX6DD.
> >
>
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] RE: Help!

From: "Steven R. Bible" <srbible@gate.net>
Date: Sat, 12 Aug 2000 09:18:12 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102306-2000.08.12-08.24.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Pat McGrath asked,

> Help
>
> How do you change the email address on this sig?

Pat,

All of the lists hosted by TAPR are run from Lyris. You can reach the main
Lyris web page from the TAPR home page. Click on TAPR LISTS. But to get
you directly to the DSPSDI, got to

   http://www.tapr.org/cgi-bin/lyris.pl?enter=dsp&text_mode=0

>From here, enter your old email and password. Then, once in, you can change
the parameters of your membership, including your email address.

 - Steve, N7HPR
   n7hpr@tapr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] lms algorithm

From: "chen fishbein" <chenfi@internet-zahav.net>
Date: Mon, 14 Aug 2000 6:44:31
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102549-2000.08.14-06.50.37--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

hi,
i have a problem implementing the lms algorithm.
does anybody has a source code(c/c++)?

thanks.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Aintel Down!!!

From: Eduardo Jacob <edu@kender.es>
Date: Tue, 15 Aug 2000 00:11:05 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102684-2000.08.14-17.23.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have just arrived from a travel that has begun this early morning and 1300 km away from home and I
have found that just the day after I left the list server (psk31 and chirps) alone for about 2 weeks, it
 stopped working. That's truly Murphy demonstration. I apologize for any inconvenience. I can also

comment now that I'll be changing the soft for a friendlier one, with the capability to un/subscribe by
 means of a graphic this month. Stay tuned and again sorry for this first time major outage.

        Eduardo/EA2BAJ

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: lms algorithm

From: abaransk@estec.esa.nl
Date: Tue, 15 Aug 2000 11:52:56 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102792-2000.08.15-04.59.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Andrzey Baranski@ESA
08/15/2000 11:52 AM

Hello Chen,
In " Digital Signal Processing - A practical approach"
by E.C Ifeachor and B.W.Jarvis on p.571 there's
a listing in C for LMS ALE.
The book has a program disk, which you have to buy separately.

Vy 73 de Andrzej (Andy) PE1ROE ex SP9BPS

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: PMP (and EVM) for 56k serial port speed

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Fri, 18 Aug 2000 13:11:02 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-103449-2000.08.18-12.17.49--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks Doug!

73,

Mark N8MH

At 12:01 PM 8/18/2000 -0400, you wrote:
>Hello,
>
>I have finally updated http://members.bellatlantic.net/~dougnad
>with all the latest 57600-baud versions of all the my EVM
>software, including bios2.asm, the various modems, DL, PMP,
>and Spy.
>
>Have fun,
>
>Doug
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: PMP (and EVM) for 56k serial port speed

From: Douglas Braun NA1DB <dougnad@bellatlantic.net>
Date: Fri, 18 Aug 2000 12:01:41 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-103437-2000.08.18-11.08.24--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

Hello,

I have finally updated http://members.bellatlantic.net/~dougnad
with all the latest 57600-baud versions of all the my EVM
software, including bios2.asm, the various modems, DL, PMP,
and Spy.

Have fun,

Doug

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: PMP (and EVM) for 56k serial port speed

From: "Pat McGrath" <pat_mcgrath@yahoo.com>
Date: Fri, 18 Aug 2000 16:00:02 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-103493-2000.08.18-18.05.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks, Doug.

----- Original Message -----
From: "Douglas Braun NA1DB" <dougnad@bellatlantic.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Friday, August 18, 2000 9:01 AM
Subject: [dsp] Re: PMP (and EVM) for 56k serial port speed

> Hello,
>
> I have finally updated http://members.bellatlantic.net/~dougnad
> with all the latest 57600-baud versions of all the my EVM
> software, including bios2.asm, the various modems, DL, PMP,
> and Spy.
>
> Have fun,
>
> Doug
>
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] EVM clock rates

From: Mike Murphree <murphree1@ispchannel.com>
Date: Sat, 19 Aug 2000 00:02:25 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-103562-2000.08.19-00.08.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have one of the original DSP56002EVMs from the TAPR group purchase
that
has a 40 MHz DSP on it. Does anyone have any idea how fast of a clock
rate
this unit will run?   Is it fast enough to run the 38.4 kbps modem code?

Thanks,
Mike N4CNW

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Re: PMP (and EVM) for 56k serial port speed

From: "todd_g1" <todd_g1@email.msn.com>
Date: Sat, 19 Aug 2000 07:16:22 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-103591-2000.08.19-09.25.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks Doug Todd
----- Original Message -----
From: "Douglas Braun NA1DB" <dougnad@bellatlantic.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Friday, August 18, 2000 9:01 AM
Subject: [dsp] Re: PMP (and EVM) for 56k serial port speed

> Hello,
>
> I have finally updated http://members.bellatlantic.net/~dougnad
> with all the latest 57600-baud versions of all the my EVM
> software, including bios2.asm, the various modems, DL, PMP,
> and Spy.
>
> Have fun,
>
> Doug
>
>
> ---
> You are currently subscribed to dsp as: todd_g1@email.msn.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] ANNOUNCEMENT: ARRL/TAPR 19th Annual DCC Sep. 22-24

From: "Steven R. Bible" <srbible@gate.net>
Date: Mon, 28 Aug 2000 10:23:35 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-105587-2000.08.28-09.30.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Notice:
September 1, 2000 is the last day to receive the special hotel room rate of
$89/night single or double and the pre-registration price for the
conference.

ARRL and TAPR 19th Annual
Digital Communications Conference
September 22-24, 2000 - Orlando, Florida

For more information see: http://www.tapr.org/dcc

Information
Mark your calendar and start making plans to attend the year's premier event
in digital communications. The 19th Annual ARRL and TAPR Digital
Communications Conference will be held September 22-24, 2000, in Orlando,
Florida - just minutes from the Orlando International
Airport.

The ARRL and TAPR Digital Communications Conference is an international
forum for radio amateurs in digital communications, networking, and related
technologies to meet, publish their work, and present new ideas and
techniques for discussion. Presenters and attendees will have the
opportunity to exchange ideas and learn about recent hardware and software
advances, theories, experimental results, and practical applications. The
Digital Communications Conference is not just for the digital expert, but
also for digitally oriented amateurs of all levels of experience.

A Conference for the Beginner as well
The conference is not just for the digital expert. As in years past an
entire session strand with beginning, intermediate, and advanced
presentations on selected topics in digital communications will be offered.
Some of the topics will include: APRS, Satellite Communications, TCP/IP,
Digital Radio, Spread Spectrum and other introductory topics. Come to the
conference and hear these topics presented by the experts!

Area Attractions
The Orlando Florida area is famous for its attractions and vacation spots. Disney World, Universal Studios, and Sea World (just to name a few) are within 15 minutes of the hotel. Shuttle service from the hotel will be available for a small fee. Cape Canaveral and Cocoa Beach are a 30 minute drive East of the hotel.

Symposia, Seminars and Banquet
Two symposia/seminars will be held which allow those with additional time and interest to make the most of the Conference. For those who may have interest in just one symposium or seminar, registration for the conference is not required to attend these activities. This allows maximum flexibility for those who may want to participate during the Digital Communications Conference, but do not have an entire weekend to devote to the event.

The Fourth APRS National Symposium will be held on Friday and will be moderated by Steve Dimse, K4HG (the developer of javAPRS). It will likely include many APRS software authors, such as Bob Bruninga, WB4APR (the father ofAPRS), Keith Sproul, WU2Z, Mark Sproul, KB2ICI (the developers of MacAPRS and WinAPRS), Brent Hildebrand, KH2Z (the developer of APRSPLUS), Mike Musick, N0QBF (developer of PocketAPRS), and other nationally known APRS leaders. Join this group for the afternoon and evening for in-depth discussions and presentations on the current and future status of APRS. This is a unique opportunity to gain insight into this fast-growing digital aspect of amateur operations that combines computers, packet radio, and GPS (Global Positioning System).

On Saturday night the DCC Banquet will be held. A guest speaker will speak after the banquet and a prize drawing will top the evening. The Grand Prize is a Palm VII Personal Digital Assistant and Synergy Systems LLC has donated two M12 development kits and many more.

The Sunday morning seminar will be focused on PIC development, design, and programming. This five-and-a-half hour seminar will focus on the things you need to know now in order to understand and begin to participate in PIC development.

Co-Hosts
The 2000 ARRL and TAPR Digital Communications Conference local co-hosts will be:
Lake Monroe Amateur Radio Society
  (http://www.qsl.net/lmars/),
Orange County ARES/RACES
  (http://evcom.net/~jvoisin/ares.htm),
Seminole County ARES/RACES
  (http://wwww.geocities.com/capecanaveral/launchpad/4773),
and Orlando Amateur Radio Club
  (http://www.oarc.org/).

International Co-Hosts PRUG (Packet Radio User Group of Japan) will be the International co-host for a third year running. PRUG will be hosting an informal social Friday evening before their seminar and symposium is held. Visit http://www.prug.or.jp for more information about PRUG.

Hotel
Conference presentations, meetings, and seminars will be held at the Orlando Airport Marriott. It is highly recommended that you book your room prior to arriving. A special DCC room rate of $89/single and $89/double per night has been blocked for 50 rooms and is available until September 1st, 2000. Once the 50 rooms have been reserved, room rates will increase. So be sure to book your rooms early! The hotel provides transportation to and from the Orlando International Airport. Please contact the hotel to arrange specific transportation needs.

Orlando Airport Marriott (conference hotel)
7499 Augusta Drive
Orlando, FL 32822
Phone 407-851-9000, Fax 407-857-6211
(http://marriotthotels.com/MCOAP/)

What you can expect at DCC 2000
- A full day of papers and breakouts for the beginner to the advanced
- Two seminars/symposiums
- The fifth annual Student Paper session.
- A banquet with Special Guest Speaker.
- Informal get-togethers throughout the weekend.
- TAPR Membership Meeting
- An event at which the most important new developments in amateur digital communications are announced.

- Digital 'movers and shakers' from all over the world in attendance.

There are few activities where your participation can be so much fun and important! What a great way to share and renew your enthusiasm for digital amateur radio! A get-together with colleagues and bringing each other up to date on your latest work -- all this, and more, for an unforgettable weekend of amateur radio and digital communications. We hope to see you at the ARRL and TAPR Digital Communications Conference on September 22-24, 2000!

Full information on the conference and hotel information can be obtained by contacting:

Tucson Amateur Packet Radio
Phone: (940) 383-0000.
Fax: (940) 566-2544
Email: tapr@tapr.org
Web: http://www.tapr.org

Registration Form
Contact the TAPR office by Phone 940-383-0000, Fax 940-566-2544, or Internet: http://www.tapr.org and tapr@tapr.org to register or for additional information.

Conference Registration includes: Conference Proceedings, Sessions, Meetings, and Lunch on Saturday.

- Pre-Registration (before Sept 1st)

$45.00 _____

- Registration (after Sept 1) or at door

$55.00 _____

- Saturday Evening Dinner (Limited Space)
Dinner with Guest Speaker
Prize Drawing

$30.00 _____

Symposia/Seminars

- 4th Annual APRS National Symposium
Friday, 1pm - 7pm. $25.00 _____

- Sunday Seminar
PIC Design, Development, and Programming

Sunday, 8:30 am - 2 pm. $20.00 _____

TOTAL _____

Name/Call:

Street Address:

City/State/Zip:

Country:

Phone Number:

Email:

Charge my credit card (circle one):

VISA MasterCard

Acct:

Expiration Date:

Signature on card:

Mail completed registration form with check to:
TAPR
8987-309 E Tanque Verde Rd #3378

Tucson, AZ 85749-9399

Or check http://www.tapr.org/dcc for an on-line registration form.

A registration packet will be mailed in September upon receipt of
registration form and payment.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] RE: EVM clock rates

From: "Diggs, Steve" <Diggs@daugherty.com>
Date: Mon, 28 Aug 2000 13:18:17 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-105639-2000.08.28-13.26.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Mike,

Drop a note to Alan Adamson, NE1H. (ne1h@ne1h.dyndns.org). Alan has the EVM
doing better than 95% efficiency download off of UO-36. He can send you the
complete code package to make it happen. I recall him talking about trying
to juice up his EVM to faster than 40MHz, but don't remember if if finished
that project. Whatever, contrary to previous emails on this list, the EVM
works GREAT on 38k with UO-36.

With regards to upgrading the clock beyond 40MHz, that project may have
fallen into what we call here in Atlanta "GUP" status...for Great Unfinished
Project. <grin>

Later,
Steve Diggs, W4EPI

-----Original Message-----
From: Mike Murphree [mailto:murphree1@ispchannel.com]
Sent: 8/19/2000 1:02 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] EVM clock rates

I have one of the original DSP56002EVMs from the TAPR group purchase
that
has a 40 MHz DSP on it. Does anyone have any idea how fast of a clock
rate
this unit will run?   Is it fast enough to run the 38.4 kbps modem code?

Thanks,
Mike N4CNW

You are currently subscribed to dsp as: Diggs@daugherty.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: EVM spur... (DSP)

From: "Pat McGrath" <pat_mcgrath@yahoo.com>
Date: Mon, 28 Aug 2000 12:48:08 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-105665-2000.08.28-14.55.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Anyone able to reduce if not eliminate the spurs.

> I never really solved it... :-(
>
> Doug
>
 >
> >
> > > I see a frequency of 144,389,530 Hz, plus or minus 50Hz or so.
> > > And I can pick up the fundamental at 3.072130 MHz.

> > > This seems to be 8th submultiple of the 24.576 CODEC xtal freq.
> > > I can pick up the 24.576 frequency too, but for some reason
> > > it is a lot weaker than the 3.072...
> > >
> > > This is all strange, because all the circuitry that uses these freqs
> > > is supposed to be contained within the CODEC chip. Possibly
> > > the analog ground of the EVM is noisy, so bypassing the audio signals
> > > to it does not help. I may try putting capacitors right on the DIN
> > > connectors on the back panel of my (homebrew) enclosure.
> > >
> > > Doug
> > > NA1DB
> > >
> > > At 07:52 AM 11/23/99 , you wrote:
> > > >Hi Dough,
> > > >   I have been posting to the DSP List but something is
preventing
> >my
> > > >messages from being reflected.
> > > >   All I wanted to make known is that the 144.39 spur is
repeated
> >every
> > > >3.072MHz, I could not find other harmonics so I suppose 3.072MHz is
the
> > > >fundamental. The 47th. harm. just falls very near the APRS freq.
(should
> > > >be 144.384) and its brothers extend well above 400MHz!!.
> > > >   Now, what is clocking at 3.072MHz into the EVM?
> > > >
> > > >   73 de Nando, CX6DD.
> > >
> >

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] RE: EVM clock rates

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 28 Aug 2000 20:38:48 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-105735-2000.08.28-19.47.57--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The answer depends on your particular EVM. Mine is rated at 66MHz, but it
runs just fine at 80MHz.

You will probably have to determine it empirically---test it and see.

73,

Mark N8MH

At 01:18 PM 8/28/2000 -0500, you wrote:
>Mike,
>
>Drop a note to Alan Adamson, NE1H. (ne1h@ne1h.dyndns.org). Alan has the EVM
>doing better than 95% efficiency download off of UO-36. He can send you the
>complete code package to make it happen. I recall him talking about trying
>to juice up his EVM to faster than 40MHz, but don't remember if if finished
>that project. Whatever, contrary to previous emails on this list, the EVM
>works GREAT on 38k with UO-36.
>
>With regards to upgrading the clock beyond 40MHz, that project may have
>fallen into what we call here in Atlanta "GUP" status...for Great Unfinished
>Project. <grin>
>
>Later,
>Steve Diggs, W4EPI
>
>-----Original Message-----
>From: Mike Murphree [mailto:murphree1@ispchannel.com]
>Sent: 8/19/2000 1:02 AM
>To: TAPR DSP Special Interest Group
>Subject: [dsp] EVM clock rates
>

>
>
>I have one of the original DSP56002EVMs from the TAPR group purchase
>that
>has a 40 MHz DSP on it. Does anyone have any idea how fast of a clock
>rate
>this unit will run?   Is it fast enough to run the 38.4 kbps modem code?
>
>Thanks,
>Mike N4CNW
>
>---
>You are currently subscribed to dsp as: Diggs@daugherty.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] 38.4Kbps for EVM

From: "Jabi" <GOVIER02@SARENET.ES>
Date: Thu, 31 Aug 2000 10:17:19
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106732-2000.08.31-10.25.02--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Dear all:
I have the last? release of the 38.4 Kbds for the DSP56002EVM.
If any is interesed, pse send mee email.
Regards de Jabi, EA2ARU.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: 38.4Kbps for EVM

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 31 Aug 2000 11:25:46 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106737-2000.08.31-10.32.46--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Can you send it to me?

Thanks,

Doug Braun
NA1DB

At 10:17 AM 8/31/00 +0000, you wrote:
>Dear all:
>I have the last? release of the 38.4 Kbds for the DSP56002EVM.
>If any is interesed, pse send mee email.
>Regards de Jabi, EA2ARU.
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] Re: 38.4Kbps for EVM

From: "Pat McGrath" <pat_mcgrath@yahoo.com>
Date: Thu, 31 Aug 2000 08:28:30 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106741-2000.08.31-10.35.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Please send me a copy.

Thanks

----- Original Message -----
From: "Jabi" <GOVIER02@SARENET.ES>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, August 31, 2000 10:17 AM
Subject: [dsp] 38.4Kbps for EVM

> Dear all:
> I have the last? release of the 38.4 Kbds for the DSP56002EVM.
> If any is interesed, pse send mee email.
> Regards de Jabi, EA2ARU.
>
> ---
> You are currently subscribed to dsp as: PATRICIO@CYBERG8T.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] Re: 38.4Kbps for EVM

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 31 Aug 2000 12:02:37 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106749-2000.08.31-11.09.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

After you "NA1DB-cise" it, will you please re-post Doug? ;-)

(Thanks to Jabi and the group for the new code...)

Mark N8MH

At 11:25 AM 8/31/00 -0400, you wrote:
>Can you send it to me?
>
>Thanks,
>
>Doug Braun
>NA1DB
>
>At 10:17 AM 8/31/00 +0000, you wrote:
> >Dear all:
> >I have the last? release of the 38.4 Kbds for the DSP56002EVM.
> >If any is interesed, pse send mee email.
> >Regards de Jabi, EA2ARU.
> >
> >---
> >You are currently subscribed to dsp as: dougnad@bellatlantic.net
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

22. [dsp] Re: 38.4Kbps for EVM

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 31 Aug 2000 12:21:25 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106752-2000.08.31-11.29.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I can try, but I cannot test this modem properly,
since I do not have a proper radio setup for this mode.
Hopefully somebody will be able to test any version

that I do...

Doug

At 12:02 PM 8/31/00 -0400, you wrote:
>After you "NA1DB-cise" it, will you please re-post Doug? ;-)
>
>(Thanks to Jabi and the group for the new code...)
>
>Mark N8MH
>
>At 11:25 AM 8/31/00 -0400, you wrote:
>>Can you send it to me?
>>
>>Thanks,
>>
>>Doug Braun
>>NA1DB
>>
>>At 10:17 AM 8/31/00 +0000, you wrote:
>> >Dear all:
>> >I have the last? release of the 38.4 Kbds for the DSP56002EVM.
>> >If any is interesed, pse send mee email.
>> >Regards de Jabi, EA2ARU.
>> >
>> >---
>> >You are currently subscribed to dsp as: dougnad@bellatlantic.net
>> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>>
>>
>>---
>>You are currently subscribed to dsp as: hammond@surrealnet.net
>>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] EVM Selection

From: Jim Sanford <wb4gcs@amsat.org>
Date: Thu, 31 Aug 2000 17:07:37 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106805-2000.08.31-16.14.40--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Gents and Ladies:

I'm considering using some dsp tools to multiplex several voice signals
on to a wideband 10ghz audio channel. Seems a quick way to go is an
evm, rather than developing custom boards, etc.

Any thoughts as to which EVM to use: Motorola 56002(etc) or Analog
Devices?

All thoughts and considerations greatfully appreciated.

Thanks & 73,
Jim
wb4gcs@amsat.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

24. [dsp] RE: EVM Selection

From: Mastenbrook Gary-G13216 <Gary.Mastenbrook@motorola.com>
Date: Thu, 31 Aug 2000 16:12:41 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-106806-2000.08.31-16.19.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Jim- Since Motorola has discontinued the 56002 EVM (at least the one that
our SPS organization made and sold), the choice might be real easy. (On the
otherhand, I've seen some non-Motorola EVM type products out there which may
do the trick for you.)

I've used both types and like them both. Maybe the bigger choice is how
much code you already have available (or can lay hands on easily). Good
luck!

73's

Gary N8DMT

Gary Mastenbrook, Product Visioneering
Location Solutions Center, Motorola, Inc.
50 E. Commerce Drive, Schaumburg, IL 60173
Email: gary.mastenbrook@[anti-spam_remove_brackets]motorola.com
Work Home Page: http://www.mot.com/
Personal Home Page: http://www.qsl.net/n8dmt

-----Original Message-----
From: Jim Sanford [mailto:wb4gcs@amsat.org]
Sent: Thursday, August 31, 2000 4:08 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] EVM Selection

Gents and Ladies:

I'm considering using some dsp tools to multiplex several voice signals
on to a wideband 10ghz audio channel. Seems a quick way to go is an
evm, rather than developing custom boards, etc.

Any thoughts as to which EVM to use: Motorola 56002(etc) or Analog
Devices?

All thoughts and considerations greatfully appreciated.

Thanks & 73,
Jim
wb4gcs@amsat.org

You are currently subscribed to dsp as: Gary.Mastenbrook@motorola.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] RE: EVM Selection

From: "Steven R. Bible" <srbible@gate.net>
Date: Thu, 31 Aug 2000 22:45:37 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106838-2000.08.31-21.52.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> Jim- Since Motorola has discontinued the 56002 EVM (at least the one that
> our SPS organization made and sold), the choice might be real
> easy. (On the
> otherhand, I've seen some non-Motorola EVM type products out
> there which may
> do the trick for you.)
>
> I've used both types and like them both. Maybe the bigger choice is how
> much code you already have available (or can lay hands on easily). Good
> luck!

Jim,

As Gary said, look for the code. I am sure since you have assembly language

experience you might want to try your hand at porting some of the EVM code
over to the EZ-KIT Lite or another easy to get, low cost evaluation (or DSK)
platform.

There is a bunch of DSP code on the tapr ftp site that we've collected and
stored in directories named after the manufaturers names and DSP chips.
Take a look at ftp://ftp.tapr.org/dsp/

Doug has the latest for the EVM at
http://members.bellatlantic.net/~dougnad/.

- Steve, N7HPR

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] CQ Thomas Sailer HB9JNX / AE4WA

From: "Steven R. Bible" <srbible@gate.net>
Date: Thu, 31 Aug 2000 22:48:52 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106839-2000.08.31-21.55.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Sorry for the list bandwidth, trying to contact Thomas. Thomas, please
email me at n7hpr@tapr.org concerning presenting your paper at DCC.

 - Steve, N7HPR
   n7hpr@tapr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

September 2000

Original source file: dsp.0009
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0009

1. [dsp] Re: dsp digest: August 31, 2000

From: FoulCraven@aol.com
Date: Fri, 1 Sep 2000 06:53:39 EDT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-106894-2000.09.01-06.00.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Although the 002EVM has been discontinued, the are a number of 56300
EVMs available. The 56300 is an easy port from 002 code since it was
designed as an extension of the 56000 family. One of the advantages
of the current 30xEVMs is that they now come with a whole lot more
flash on board and with the RS232 voltage level translation. They also
draw a whole lot less current than the 002EVM. The 307 and 311 have
a hardware filter co-processor that you feed coefficients and data and
it does the filtering all in hardware.

The choice may not be all that easy, since in either case (30xEVM or
another DSP), you will need to modify the hardware. One starts out a
little ahead of the game because of the compatibility of the 300 family
with the existing bank of 002 code.

-david
wb2liv

>From: Mastenbrook Gary-G13216 <Gary.Mastenbrook@motorola.com>
>Jim- Since Motorola has discontinued the 56002 EVM (at least the one that
>our SPS organization made and sold), the choice might be real easy. (On the
>otherhand, I've seen some non-Motorola EVM type products out there which
>may do the trick for you.)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: 38.4Kbps for EVM

From: "Prawit Tungtanapong" <hs1yx@asiaaccess.net.th>
Date: Sat, 2 Sep 2000 12:05:17 +0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107047-2000.09.02-00.10.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Dear Jabi,
 please sent me one.
many thanks
prawit (hs1yx)
----- Original Message -----
From: "Jabi" <GOVIER02@SARENET.ES>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, August 31, 2000 10:17 AM
Subject: [dsp] 38.4Kbps for EVM

> Dear all:
> I have the last? release of the 38.4 Kbds for the DSP56002EVM.
> If any is interesed, pse send mee email.
> Regards de Jabi, EA2ARU.
>
> ---
> You are currently subscribed to dsp as: hs1yx@asiaaccess.net.th
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: 38.4Kbps for EVM

From: "TODD_G1" <TODD_G1@email.msn.com>
Date: Sat, 2 Sep 2000 07:12:38 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-107103-2000.09.02-09.18.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Jabi; If it isnt to much trouble I would like to have it. Thanks so much for
the effort.   Todd
----- Original Message -----
From: "Jabi" <GOVIER02@SARENET.ES>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, August 31, 2000 10:17 AM
Subject: [dsp] 38.4Kbps for EVM

> Dear all:
> I have the last? release of the 38.4 Kbds for the DSP56002EVM.
> If any is interesed, pse send mee email.
> Regards de Jabi, EA2ARU.
>
> ---
> You are currently subscribed to dsp as: todd_g1@email.msn.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] PC with sound card Oscilloscope

From: "Prawit Tungtanapong" <hs1yx@asiaaccess.net.th>
Date: Sun, 3 Sep 2000 10:44:29 +0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107204-2000.09.02-22.50.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Dear All,
        Who knonw the site for download PC base with sound card oscilloscope
or any PC base oscilloscope software.

many thaks.
prawit

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5. [dsp] 38.4 Kbds

From: "Jabi Aguirre" <govier02@sarenet.es>
Date: Mon, 4 Sep 2000 07:52:05 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107417-2000.09.04-00.57.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Dear all
I send you the code.
Regards de Jabi, EA2ARU.
[Attachment: Release-1.0.0.zip; application/x-zip-compressed; 47,570 bytes]

6. [dsp] Re: 38.4 Kbds--help?

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 04 Sep 2000 20:02:29 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107565-2000.09.04-19.09.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks Jabi...

Now--anybody figure out how to add the ability for split xmit/receive on
the TAPR/EVM Radio Interface? (I want to xmit on one EVM radio port,
receive on the other)

I tried to duplicate the changes NE1H documented in a prior version of the
38k4 code, but it generates lots of errors during assembly :(

I know functionally it needs something like this added:

```
        if RxRightChannel                       ; added by NE1H to support
RX on the right channel of the evm!

        move               #buffer+1,r2          ;Pactual
        else

However, it's not as simple as adding a line or two (I've tried it...)--too
many other code line changes to allow a simple plug-in solution.

Some sample errors are:

**** 752 [9k6t9k6r.asm 312]: ERROR --- Symbol undefined on pass 2: filtx (X
data
  move field)
**** 753 [9k6t9k6r.asm 313]: ERROR --- Symbol undefined on pass 2: oftaps
(X dat
a move field)
**** 755 [9k6t9k6r.asm 315]: ERROR --- Symbol undefined on pass 2: ocoeffs
(X da
ta move field)
**** 756 [9k6t9k6r.asm 316]: ERROR --- Symbol undefined on pass 2: ofnpol
(X dat
a move field)
**** 757 [9k6t9k6r.asm 317]: ERROR --- Symbol undefined on pass 2: oftaps
(X dat
a move field)
**** 759 [9k6t9k6r.asm 319]: ERROR --- Symbol undefined on pass 2:
rxfil_ntaps (
X data move field)
**** 759 [9k6t9k6r.asm 319]: FATAL --- Forward reference sequence failure

If anybody else is working on this, please let me know.  I'm going to need
some help :)

Thanks,

Mark N8MH

At 07:52 AM 9/4/2000 +0200, you wrote:
>Dear all
>I send you the code.
>Regards de Jabi, EA2ARU.


Mark L. Hammond  [N8MH]


---
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```

7. [dsp] RE: dsp digest: September 04, 2000

```
From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Tue, 5 Sep 2000 17:42:09 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107772-2000.09.05-16.50.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I've looked that Jabi's new code, the changes that I made should not be a
big deal to do.  One thing that I haven't done yet it to see if the new code
will run with the bios2 and leonid that I used originally.

I'll be taking a look at it very soon.  I'll post if I'm successful, I
suspect I will be :-)... Thanks where thanks are due.  Doug, was really the
guy who pointed me at the changes for split support.  I don't know for sure,
but I think they will still work.

More later,
Alan

-----Original Message-----
From: bounce-dsp-14301@lists.tapr.org
[mailto:bounce-dsp-14301@lists.tapr.org]On Behalf Of TAPR DSP Special
Interest Group digest
Sent: Tuesday, September 05, 2000 1:02 AM
To: dsp digest recipients
Subject: dsp digest: September 04, 2000
```

TAPR DSP Special Interest Group Digest for Monday, September 04, 2000.

1. 38.4 Kbds
2. Re: 38.4 Kbds--help?

Subject: 38.4 Kbds
From: "Jabi Aguirre" <govier02@sarenet.es>
Date: Mon, 4 Sep 2000 07:52:05 +0200
X-Message-Number: 1

This is a multi-part message in MIME format.

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Content-Type: multipart/alternative;
	boundary="----=_NextPart_001_0186_01C01645.04C70440"

------=_NextPart_001_0186_01C01645.04C70440
Content-Type: text/plain;
	charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Dear all
I send you the code.
Regards de Jabi, EA2ARU.

------=_NextPart_001_0186_01C01645.04C70440
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	charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

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<DIV>
<DIV><FONT size=3D4>I send you the code.</FONT></DIV>
<DIV><FONT size=3D4>Regards de Jabi,=20
EA2ARU.</FONT></DIV></FONT></DIV></BODY></HTML>

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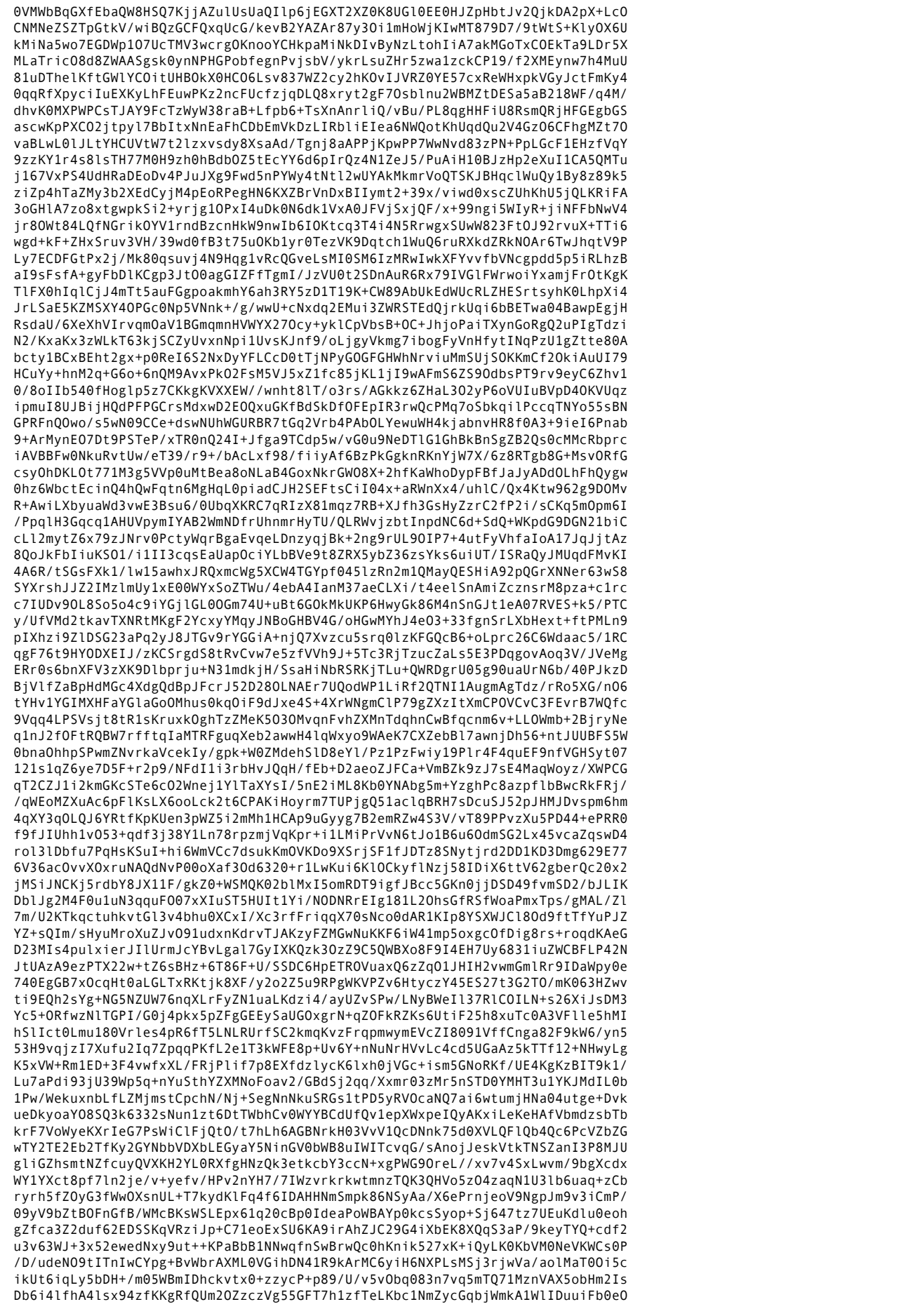
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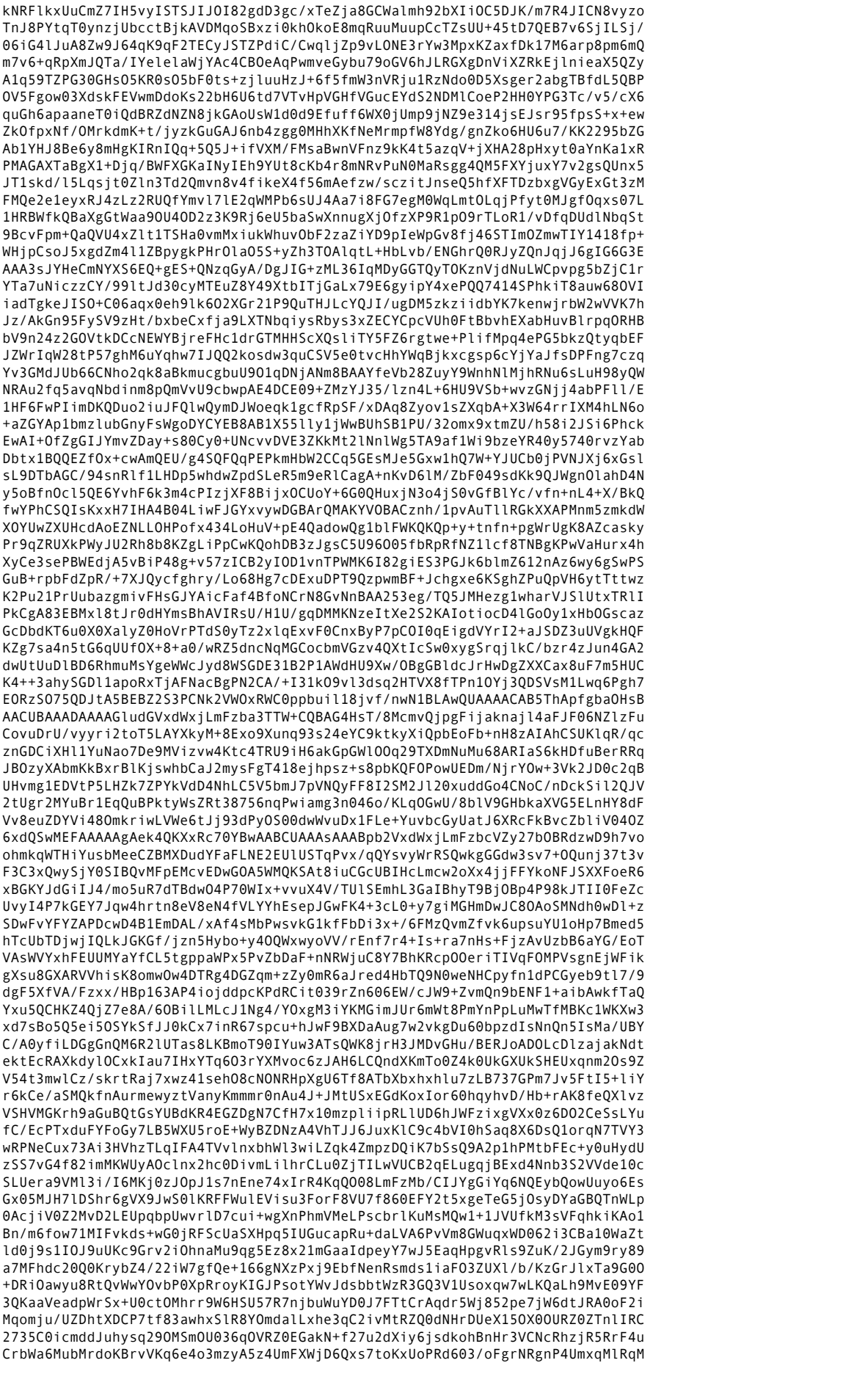

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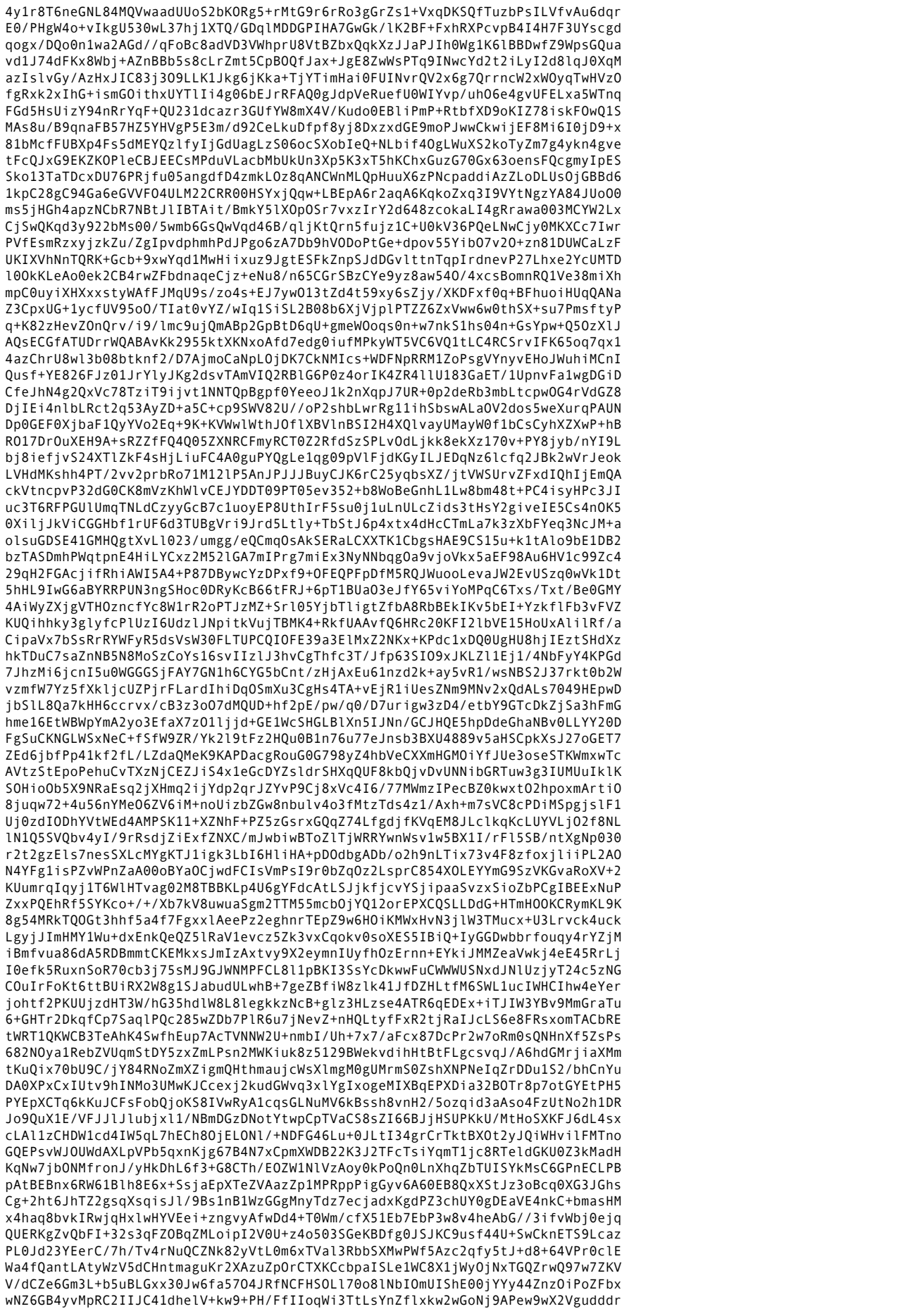

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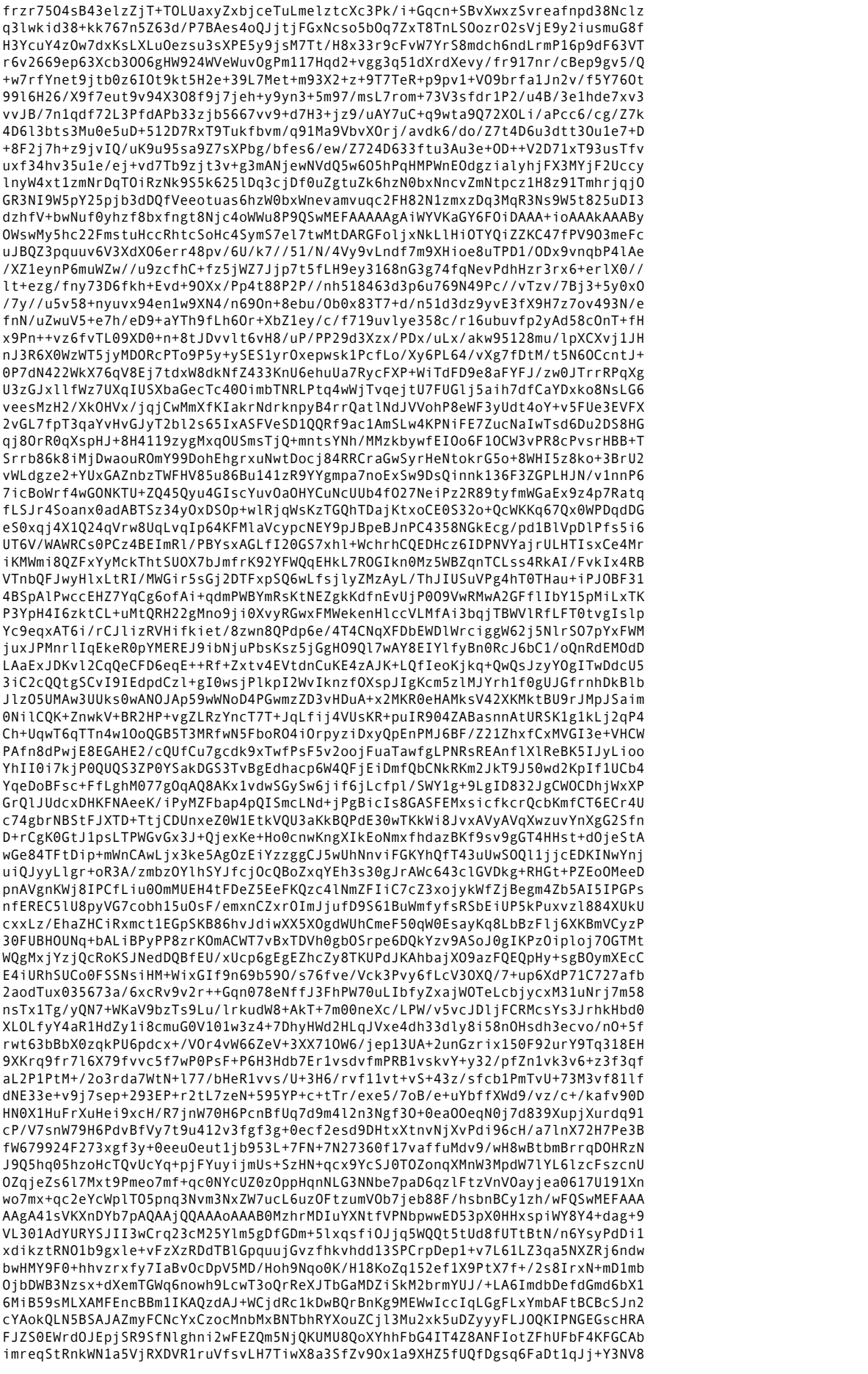
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------=_NextPart_000_0185_01C01645.04C57DA0--


------------------------------------------------------------------------

Subject: Re: 38.4 Kbds--help?
From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 04 Sep 2000 20:02:29 -0400
X-Message-Number: 2

Thanks Jabi...

Now--anybody figure out how to add the ability for split xmit/receive on
the TAPR/EVM Radio Interface?  (I want to xmit on one EVM radio port,
receive on the other)

I tried to duplicate the changes NE1H documented in a prior version of the
38k4 code, but it generates lots of errors during assembly :(

I know functionally it needs something like this added:

         if RxRightChannel                       ; added by NE1H to support
RX on the right channel of the evm!

         move                #buffer+1,r2          ;Pactual
         else

However, it's not as simple as adding a line or two (I've tried it...)--too
many other code line changes to allow a simple plug-in solution.

Some sample errors are:

**** 752 [9k6t9k6r.asm 312]: ERROR --- Symbol undefined on pass 2: filtx (X
data
  move field)
**** 753 [9k6t9k6r.asm 313]: ERROR --- Symbol undefined on pass 2: oftaps
(X dat
a move field)
**** 755 [9k6t9k6r.asm 315]: ERROR --- Symbol undefined on pass 2: ocoeffs
(X da
ta move field)
**** 756 [9k6t9k6r.asm 316]: ERROR --- Symbol undefined on pass 2: ofnpol
(X dat
a move field)
**** 757 [9k6t9k6r.asm 317]: ERROR --- Symbol undefined on pass 2: oftaps
(X dat
a move field)
**** 759 [9k6t9k6r.asm 319]: ERROR --- Symbol undefined on pass 2:
rxfil_ntaps (
X data move field)
**** 759 [9k6t9k6r.asm 319]: FATAL --- Forward reference sequence failure

If anybody else is working on this, please let me know.  I'm going to need
some help :)

Thanks,


```

Mark N8MH

At 07:52 AM 9/4/2000 +0200, you wrote:
>Dear all
>I send you the code.
>Regards de Jabi, EA2ARU.

Mark L. Hammond [N8MH]

END OF DIGEST

You are currently subscribed to dsp as: ne1h@ne1h.dyndns.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] RE: dsp digest: September 04, 2000

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Tue, 05 Sep 2000 17:51:40 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107777-2000.09.05-16.58.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

"Eagle Eyes" Doug NA1DB fixed me up last night..I had overlooked adding an
"endif" in the code while moving your changes into the latest 38k4 .asm file.

I basically pretended to start from scratch, using Doug's latest EVM code
package (including his bios2 and leonid), and put the relevant code files
from Jabi in the same directory, and that was sufficient for success.

In theory it works--with UO-36 off the air, I can't test it ;-) But I did
assemble and use a 9600 xmit/9600 receive version that apparently works
fine on the air.

73,

Mark

At 05:42 PM 9/5/2000 -0400, you wrote:
>I've looked that Jabi's new code, the changes that I made should not be a
>big deal to do. One thing that I haven't done yet it to see if the new code
>will run with the bios2 and leonid that I used originally.
>
>I'll be taking a look at it very soon. I'll post if I'm successful, I
>suspect I will be :-)... Thanks where thanks are due. Doug, was really the
>guy who pointed me at the changes for split support. I don't know for sure,
>but I think they will still work.
>
>More later,
>Alan
>
>-----Original Message-----
>From: bounce-dsp-14301@lists.tapr.org
>[mailto:bounce-dsp-14301@lists.tapr.org]On Behalf Of TAPR DSP Special
>Interest Group digest
>Sent: Tuesday, September 05, 2000 1:02 AM
>To: dsp digest recipients
>Subject: dsp digest: September 04, 2000
>
>
>TAPR DSP Special Interest Group Digest for Monday, September 04, 2000.
>
>1. 38.4 Kbds
>2. Re: 38.4 Kbds--help?
>
>--

```
>
>Subject: 38.4 Kbds
>From: "Jabi Aguirre" <govier02@sarenet.es>
>Date: Mon, 4 Sep 2000 07:52:05 +0200
>X-Message-Number: 1
>
>This is a multi-part message in MIME format.
>
>------=_NextPart_000_0185_01C01645.04C57DA0
>Content-Type: multipart/alternative;
>         boundary="----=_NextPart_001_0186_01C01645.04C70440"
>
>
>------=_NextPart_001_0186_01C01645.04C70440
>Content-Type: text/plain;
>         charset="iso-8859-1"
>Content-Transfer-Encoding: quoted-printable
>
>Dear all
>I send you the code.
>Regards de Jabi, EA2ARU.
>
>------=_NextPart_001_0186_01C01645.04C70440
>Content-Type: text/html;
>         charset="iso-8859-1"
>Content-Transfer-Encoding: quoted-printable
>
><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
>Dear all
>I send you the code.
>Regards de Jabi,=20 EA2ARU.
>
>------=_NextPart_001_0186_01C01645.04C70440--
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>Content-Disposition: attachment;
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>
>------=_NextPart_000_0185_01C01645.04C57DA0--
>
>
>-----------------------------------------------------------------------
>
>Subject: Re: 38.4 Kbds--help?
>From: "Mark L. Hammond" <hammond@surrealnet.net>
>Date: Mon, 04 Sep 2000 20:02:29 -0400
>X-Message-Number: 2
>
>Thanks Jabi...
>
>Now--anybody figure out how to add the ability for split xmit/receive on
>the TAPR/EVM Radio Interface?  (I want to xmit on one EVM radio port,
>receive on the other)
>
>I tried to duplicate the changes NE1H documented in a prior version of the
>38k4 code, but it generates lots of errors during assembly :(
>
>I know functionally it needs something like this added:
>
>          if RxRightChannel                      ; added by NE1H to support
>RX on the right channel of the evm!
>
>          move               #buffer+1,r2          ;Pactual
>          else
>
>However, it's not as simple as adding a line or two (I've tried it...)--too
>many other code line changes to allow a simple plug-in solution.
>
>Some sample errors are:
>
>**** 752 [9k6t9k6r.asm 312]: ERROR --- Symbol undefined on pass 2: filtx (X
>data
>   move field)
>**** 753 [9k6t9k6r.asm 313]: ERROR --- Symbol undefined on pass 2: oftaps
>(X dat
>a move field)
>**** 755 [9k6t9k6r.asm 315]: ERROR --- Symbol undefined on pass 2: ocoeffs
>(X da
>ta move field)
>**** 756 [9k6t9k6r.asm 316]: ERROR --- Symbol undefined on pass 2: ofnpol
>(X dat
>a move field)
>**** 757 [9k6t9k6r.asm 317]: ERROR --- Symbol undefined on pass 2: oftaps
>(X dat
>a move field)
>**** 759 [9k6t9k6r.asm 319]: ERROR --- Symbol undefined on pass 2:
>rxfil_ntaps (
>X data move field)
>**** 759 [9k6t9k6r.asm 319]: FATAL --- Forward reference sequence failure
>
>If anybody else is working on this, please let me know.  I'm going to need
>some help :)
>
>Thanks,
>
>Mark N8MH
>
>At 07:52 AM 9/4/2000 +0200, you wrote:
> >Dear all
> >I send you the code.
> >Regards de Jabi, EA2ARU.
>
>
>Mark L. Hammond  [N8MH]
>
>
>
>
>---
```

>
>END OF DIGEST
>
>---
>You are currently subscribed to dsp as: ne1h@ne1h.dyndns.org
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] sorry -->RE: dsp digest: September 04, 2000

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Tue, 05 Sep 2000 17:53:10 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107778-2000.09.05-17.01.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Sorry about the long internal attachment being shipped back to the list on
my previous message...didn't notice before I hit "send". I should have
cleaned it up a bit...

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] RE: dsp digest: September 04, 2000

From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Tue, 5 Sep 2000 18:34:26 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107785-2000.09.05-17.42.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Update, I believe I have a working version of the 38k4 code from the 1.0
release for the EVM/RI. I don't know yet and will have to wait for the
6:40ish pm EDT pass of uo-36 to know for sure. Biggest problem, uo-36
hasn't been up at least the last time I tried this. I'll let you all know.

Alan

-----Original Message-----
From: bounce-dsp-14301@lists.tapr.org
[mailto:bounce-dsp-14301@lists.tapr.org]On Behalf Of TAPR DSP Special
Interest Group digest
Sent: Tuesday, September 05, 2000 1:02 AM
To: dsp digest recipients
Subject: dsp digest: September 04, 2000

TAPR DSP Special Interest Group Digest for Monday, September 04, 2000.

1. 38.4 Kbds
2. Re: 38.4 Kbds--help?

Subject: 38.4 Kbds
From: "Jabi Aguirre" <govier02@sarenet.es>
Date: Mon, 4 Sep 2000 07:52:05 +0200
X-Message-Number: 1

This is a multi-part message in MIME format.

------=_NextPart_000_0185_01C01645.04C57DA0
Content-Type: multipart/alternative;

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        boundary="----=_NextPart_001_0186_01C01645.04C70440"


------=_NextPart_001_0186_01C01645.04C70440
Content-Type: text/plain;
        charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Dear all
I send you the code.
Regards de Jabi, EA2ARU.

------=_NextPart_001_0186_01C01645.04C70440
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        charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

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<META content=3D"MSHTML 5.00.2920.0" name=3DGENERATOR>
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</HEAD>
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<DIV>
<DIV><FONT size=3D4>I send you the code.</FONT></DIV>
<DIV><FONT size=3D4>Regards de Jabi,=20
EA2ARU.</FONT></DIV></FONT></DIV></BODY></HTML>

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Content-Transfer-Encoding: base64
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        filename="Release-1.0.0.zip"

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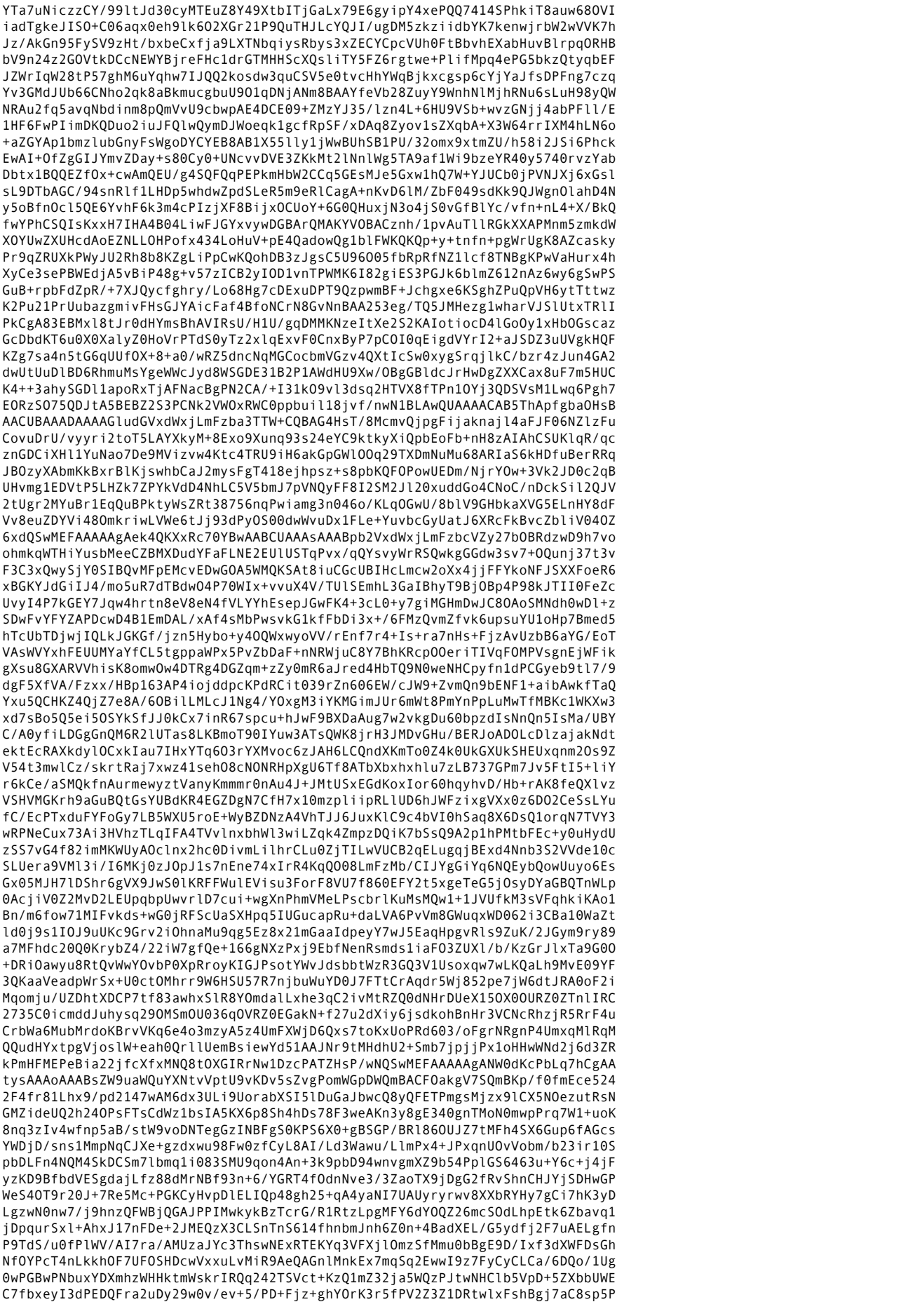

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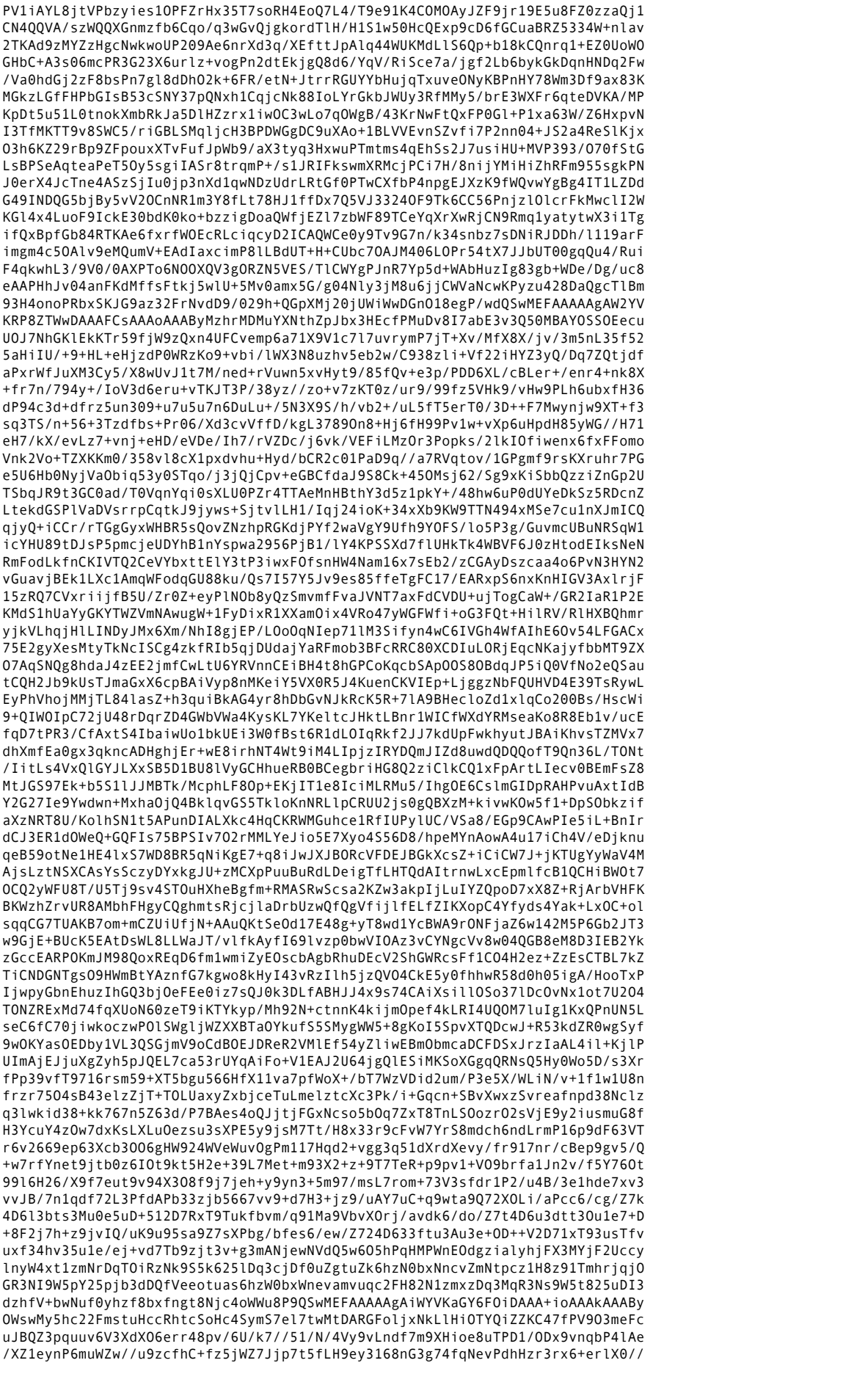
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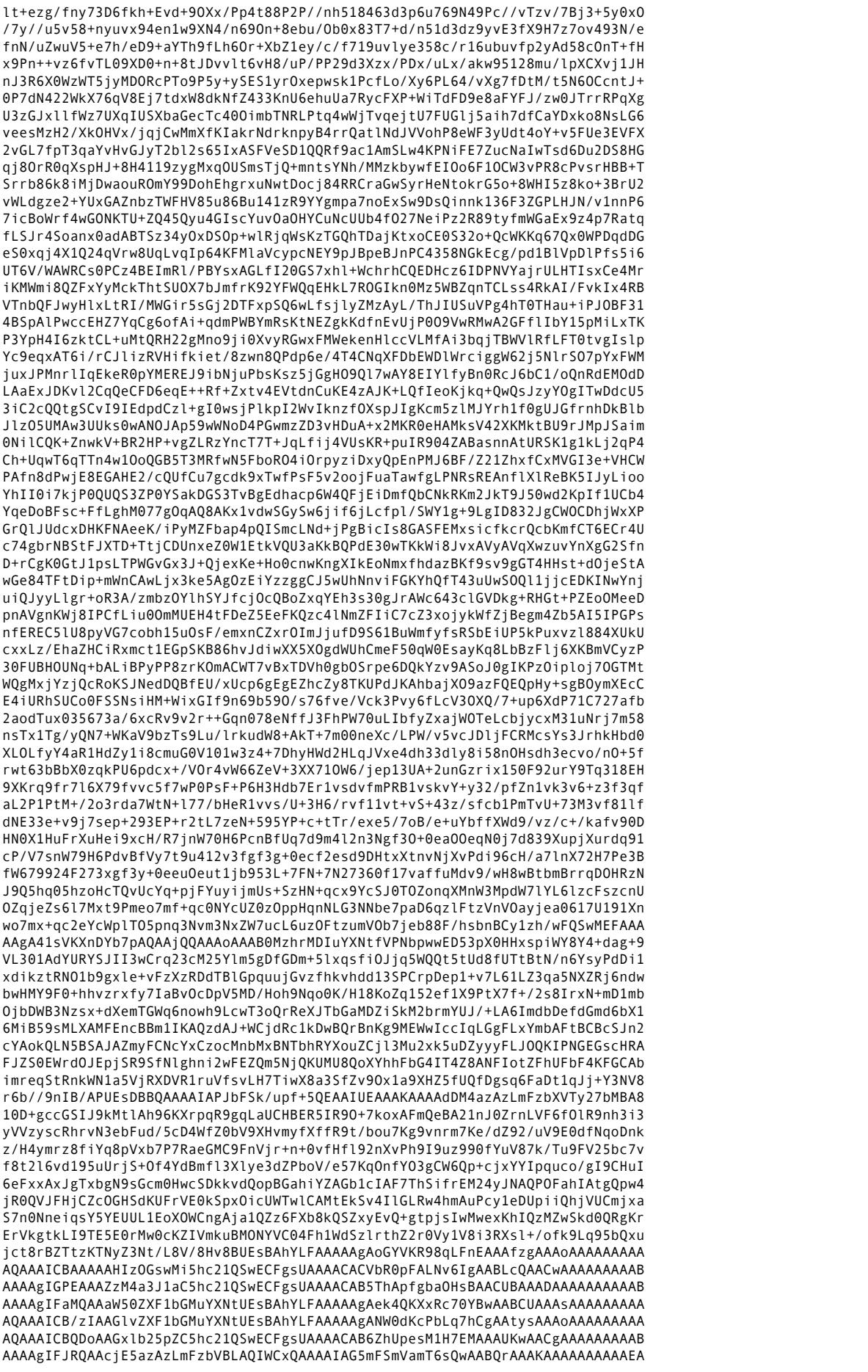
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------------------------------------------------------------------------

Subject: Re: 38.4 Kbds--help?
From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 04 Sep 2000 20:02:29 -0400
X-Message-Number: 2

Thanks Jabi...

Now--anybody figure out how to add the ability for split xmit/receive on
the TAPR/EVM Radio Interface?  (I want to xmit on one EVM radio port,
receive on the other)

I tried to duplicate the changes NE1H documented in a prior version of the
38k4 code, but it generates lots of errors during assembly :(

I know functionally it needs something like this added:

         if RxRightChannel                       ; added by NE1H to support
RX on the right channel of the evm!

         move               #buffer+1,r2          ;Pactual
         else

However, it's not as simple as adding a line or two (I've tried it...)--too
many other code line changes to allow a simple plug-in solution.

Some sample errors are:

**** 752 [9k6t9k6r.asm 312]: ERROR --- Symbol undefined on pass 2: filtx (X
data
  move field)
**** 753 [9k6t9k6r.asm 313]: ERROR --- Symbol undefined on pass 2: oftaps
(X dat
a move field)
**** 755 [9k6t9k6r.asm 315]: ERROR --- Symbol undefined on pass 2: ocoeffs
(X da
ta move field)
**** 756 [9k6t9k6r.asm 316]: ERROR --- Symbol undefined on pass 2: ofnpol
(X dat
a move field)
**** 757 [9k6t9k6r.asm 317]: ERROR --- Symbol undefined on pass 2: oftaps
(X dat
a move field)
**** 759 [9k6t9k6r.asm 319]: ERROR --- Symbol undefined on pass 2:
rxfil_ntaps (
X data move field)
**** 759 [9k6t9k6r.asm 319]: FATAL --- Forward reference sequence failure
If anybody else is working on this, please let me know.  I'm going to need
some help :)

Thanks,

Mark N8MH

At 07:52 AM 9/4/2000 +0200, you wrote:
>Dear all
>I send you the code.
>Regards de Jabi, EA2ARU.


Mark L. Hammond  [N8MH]



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END OF DIGEST
```

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11. [dsp] dsp93

From: Art Coulombe <w7hgk@innw.net>
Date: Thu, 07 Sep 2000 10:16:34 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108111-2000.09.07-12.24.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Greetings
Is there only interest in the dsp93? I have one with the paccom tnc
installed if only one is interested in dealing email me direct.
tnx's art

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: dsp93

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 07 Sep 2000 20:26:36 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108138-2000.09.07-19.33.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thoughts about the DSP-93---

What kind of telemtry is PhaseIIID going to use? If it uses the same as
AO-13, then the DSP-93 might be useful in decoding that, since there is
code for that purpose as I recall (400 baud PSK or something? written by
Frank Perkins)

73,

Mark

At 10:16 AM 9/7/2000 -0700, you wrote:
>Greetings
>Is there only interest in the dsp93? I have one with the paccom tnc
>installed if only one is interested in dealing email me direct.
>tnx's art
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Re: dsp93

From: w4sm@cstone.net (Stacey Mills)
Date: Thu, 07 Sep 2000 21:22:58 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108142-2000.09.07-20.31.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 08:26 PM 2000-09-07 -0400, Mark L. Hammond wrote:
>Thoughts about the DSP-93---
>
>What kind of telemtry is PhaseIIID going to use? If it uses the same as
>AO-13, then the DSP-93 might be useful in decoding that, since there is
>code for that purpose as I recall (400 baud PSK or something? written by

>Frank Perkins)
>
>73,
>
>Mark

Frank does indeed have a perfectly great working demodulator for 400 bps
PSK. I've been using it for quite a while during the P3D
development. Importantly, it grabs the full 514 bytes, including the
terminal 2 CRCC bytes.

--
 ____
  Stacey E. Mills, W4SM   WWW: http://www.cstone.net/~w4sm/ham1.html
   Charlottesville, VA   PGP key: http://www.cstone.net/~w4sm/key
 ____

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] Re: dsp93

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 07 Sep 2000 21:38:35 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108144-2000.09.07-20.45.40--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks for confirming, Stacey. I thought that was the case, but wasn't
positive. Maybe PhaseIIID will cause a "DSP-93 revival" ;-)

I thought there was similar code for the 56002 EVM? Or am I mistaken on
that? I can't seem to find it, though....

Mark

At 09:22 PM 9/7/2000 -0400, you wrote:
>At 08:26 PM 2000-09-07 -0400, Mark L. Hammond wrote:
>>Thoughts about the DSP-93---
>>
>>What kind of telemtry is PhaseIIID going to use? If it uses the same as
>>AO-13, then the DSP-93 might be useful in decoding that, since there is
>>code for that purpose as I recall (400 baud PSK or something? written by
>>Frank Perkins)
>>
>>73,
>>
>>Mark
>
>Frank does indeed have a perfectly great working demodulator for 400 bps
>PSK. I've been using it for quite a while during the P3D
>development. Importantly, it grabs the full 514 bytes, including the
>terminal 2 CRCC bytes.
>
>
>
>--
> ____
> Stacey E. Mills, W4SM   WWW: http://www.cstone.net/~w4sm/ham1.html
>   Charlottesville, VA   PGP key: http://www.cstone.net/~w4sm/key
> ____
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] Re: dsp93

From: w4sm@cstone.net (Stacey Mills)
Date: Thu, 07 Sep 2000 22:14:10 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108148-2000.09.07-21.21.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 09:38 PM 2000-09-07 -0400, you wrote:
>Thanks for confirming, Stacey. I thought that was the case, but wasn't
>positive. Maybe PhaseIIID will cause a "DSP-93 revival" ;-)
>
>I thought there was similar code for the 56002 EVM? Or am I mistaken on
>that? I can't seem to find it, though....
>
>Mark

Don't know for sure about the 56002EVM. Seems like I've heard rumors
also... Even if it doesn't currently exist, the 400 bps PSK code for the
DSP-12/2232 (Motorola 56001 DSP chip is available (somewhere) and should
be easier to port to the 56002 than the DSP-93 code or the TI chip.

...at least that's what my DSP guru says :-)

If you want to pursue it, the DSP-2232 code needs modifying to accept all
514 bytes of the telemetry. Currently, it only grabs 512 and misses the
CRCC's.

--

  ____
  Stacey E. Mills, W4SM   WWW: http://www.cstone.net/~w4sm/ham1.html
   Charlottesville, VA   PGP key: http://www.cstone.net/~w4sm/key
  ____

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: dsp93

From: "Moe Wheatley" <ae4jy@mindspring.com>
Date: Fri, 8 Sep 2000 08:14:03 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108217-2000.09.08-07.22.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Has/is anyone working on writing any PhaseIIID telemetry programs using a
soundcard? Most PC's have as much if not more horsepower than the DSP93 TI
chip, are a lot easier to program, and you get a GUI interface for free.
Seems like it would be a good fit since there is no ARQ so the long
operating system delays could be tolerated.
Also could take advantage of the hard disk and capture/replay signals using
.wav files.
Oops, did i just volunteer? ;>(

moe,ae4jy

>Thoughts about the DSP-93---
>
>What kind of telemtry is PhaseIIID going to use? If it uses the same as
>AO-13, then the DSP-93 might be useful in decoding that, since there is
>code for that purpose as I recall (400 baud PSK or something? written by
>Frank Perkins)
>
>73,
>
>Mark
> Frank does indeed have a perfectly great working demodulator for 400 bps
> PSK. I've been using it for quite a while during the P3D
> development. Importantly, it grabs the full 514 bytes, including the
> terminal 2 CRCC bytes.

You are currently subscribed to dsp as: lyris.dsp@tapr.org

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] Phase III Telemetry

From: Ray Suban <rays@waldonet.net.mt>
Date: Fri, 8 Sep 2000 20:39:28 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108261-2000.09.08-13.54.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Modem code for the 400 Baud Phase III telemetry has been written for the EVM
56002 by DF6JB. I do not remember where I downloaded the code. I modified the
code to use the Leonid monitor and I can upload the code to the tapr ftp site

73
Ray

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] Re: Phase III Telemetry

From: "Stacey E. Mills, M.D." <w4sm@cstone.net>
Date: Fri, 08 Sep 2000 15:01:32 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108264-2000.09.08-14.09.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 08:39 PM 9/8/2000 +0200, Ray Suban wrote:
>Modem code for the 400 Baud Phase III telemetry has been written for the EVM
>56002 by DF6JB. I do not remember where I downloaded the code. I modified the
>code to use the Leonid monitor and I can upload the code to the tapr ftp site
>
>73
>Ray

Thanks!! Does it grab the full 514 bytes??? I can test it if you can send
it to me. In addition to an *.obj file, I'd love to see the source code.

--
____
Stacey E. Mills, M.D. WEB: http://www.people.virginia.edu/~sem2r/
Charlottesville, VA   E-Mail: sem2r@virginia.edu or w4sm@cstone.net
                         Office Phone: 804-982-4406 Fax: 804-924-8767
____

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: Phase III Telemetry

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Fri, 08 Sep 2000 15:43:53 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108267-2000.09.08-14.51.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Found this with a quick search:

http://ourworld.compuserve.com/homepages/df6jb/df6jb_mode.htm#BPSK400

What is an "EasyDSP" anyhow?

73,

Mark

At 03:01 PM 9/8/2000 -0400, you wrote:
>At 08:39 PM 9/8/2000 +0200, Ray Suban wrote:
>>Modem code for the 400 Baud Phase III telemetry has been written for the EVM
>>56002 by DF6JB. I do not remember where I downloaded the code. I
>>modified the
>>code to use the Leonid monitor and I can upload the code to the tapr ftp site
>>
>>73
>>Ray

>
>Thanks!! Does it grab the full 514 bytes??? I can test it if you can
>send it to me. In addition to an *.obj file, I'd love to see the source code.
>
>
>
>--
>____
>Stacey E. Mills, M.D. WEB: http://www.people.virginia.edu/~sem2r/
>Charlottesville, VA   E-Mail: sem2r@virginia.edu or w4sm@cstone.net
>   Office Phone: 804-982-4406 Fax: 804-924-8767
>____
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] Re: Phase III Telemetry

From: Johan Forrer <forrerj@peak.org>
Date: Fri, 8 Sep 2000 14:34:27 -0700 (PDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108271-2000.09.08-16.41.41--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Mark,

EasyDSP is a M56002 box designed and manufactured by DF6JB specifically
for use in radio environments. Supports four radio ports that can be
switched by software, also features maxed-out memory complement for a
56002.

It runs the usual collection of EVM code (with minor mods.)
I have two of them in use and am most impressed by the detail given to RFI
shielding and mechanical rigidity. These are really beautifully made
units. I displayed them at last year's DCC and several folks stopped to
admire them.

73,

Johan, KC7WW

On Fri, 8 Sep 2000, Mark L. Hammond wrote:

> Found this with a quick search:
>
> http://ourworld.compuserve.com/homepages/df6jb/df6jb_mode.htm#BPSK400
>
> What is an "EasyDSP" anyhow?
>
> 73,
>
> Mark
>
> At 03:01 PM 9/8/2000 -0400, you wrote:
> >At 08:39 PM 9/8/2000 +0200, Ray Suban wrote:
> >>Modem code for the 400 Baud Phase III telemetry has been written for the EVM
> >>56002 by DF6JB. I do not remember where I downloaded the code. I
> >>modified the
> >>code to use the Leonid monitor and I can upload the code to the tapr ftp site
> >>
> >>73
> >>Ray
> >
> >Thanks!! Does it grab the full 514 bytes??? I can test it if you can
> >send it to me. In addition to an *.obj file, I'd love to see the source code.
> >
> >
> >

> >--
> >_____
> >Stacey E. Mills, M.D. WEB: http://www.people.virginia.edu/~sem2r/
> >Charlottesville, VA   E-Mail: sem2r@virginia.edu or w4sm@cstone.net
> >   Office Phone: 804-982-4406 Fax: 804-924-8767
> >_____
> >
> >
> >---
> >You are currently subscribed to dsp as: hammond@surrealnet.net
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
>
> Mark L. Hammond [N8MH]
>
>
> ---
> You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] Re: Phase III Telemetry

From: Jim Sanford <wb4gcs@amsat.org>
Date: Fri, 08 Sep 2000 21:12:15 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108288-2000.09.08-20.19.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Johan:
What do they cost??

73,
jim
wb4gcs@amsat.org

Johan Forrer wrote:

> Mark,
>
> EasyDSP is a M56002 box designed and manufactured by DF6JB specifically
> for use in radio environments. Supports four radio ports that can be
> switched by software, also features maxed-out memory complement for a
> 56002.
>
> It runs the usual collection of EVM code (with minor mods.)
> I have two of them in use and am most impressed by the detail given to RFI
> shielding and mechanical rigidity. These are really beautifully made
> units. I displayed them at last year's DCC and several folks stopped to
> admire them.
>
> 73,
>
> Johan, KC7WW
>
> On Fri, 8 Sep 2000, Mark L. Hammond wrote:
>
> > Found this with a quick search:
> >
> > http://ourworld.compuserve.com/homepages/df6jb/df6jb_mode.htm#BPSK400
> >
> > What is an "EasyDSP" anyhow?
> >
> > 73,
> >
> > Mark
> >
> > At 03:01 PM 9/8/2000 -0400, you wrote:
> > >At 08:39 PM 9/8/2000 +0200, Ray Suban wrote:
> > >>Modem code for the 400 Baud Phase III telemetry has been written for the EVM
> > >>56002 by DF6JB. I do not remember where I downloaded the code. I
> > >>modified the
> > >>code to use the Leonid monitor and I can upload the code to the tapr ftp site

> > >>
> > >>73
> > >>Ray
> > >
> > >Thanks!! Does it grab the full 514 bytes??? I can test it if you can
> > >send it to me. In addition to an *.obj file, I'd love to see the source code.
> > >
> > >
> > >
> > >--
> > >____
> > >Stacey E. Mills, M.D. WEB: http://www.people.virginia.edu/~sem2r/
> > >Charlottesville, VA   E-Mail: sem2r@virginia.edu or w4sm@cstone.net
> > >   Office Phone: 804-982-4406 Fax: 804-924-8767
> > >____
> > >
> > >
> > >---
> > >You are currently subscribed to dsp as: hammond@surrealnet.net
> > >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> > >
> >
> >
> > Mark L. Hammond [N8MH]
> >
> >
> > ---
> > You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
>
> ---
> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

22. [dsp] EVM code: new version 1.31

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Fri, 08 Sep 2000 22:16:22 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108291-2000.09.08-21.24.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

N8MH found an error in bios2.asm that caused problems
with the serial port at 80 MHz. The real problem was
that it was really running at 76 MHz.

I have updated my EVM code collection to version 1.31
at http://www.dougbraun.com. The only changes are to bios2.asm
and leonid.asm, to fix the aforementioned problem.

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] Re: Phase III Telemetry

From: Johan Forrer <forrerj@peak.org>
Date: Fri, 08 Sep 2000 19:08:13 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108292-2000.09.08-22.06.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Jim,

They were around $500 assembled and tested.
On the web page it appears that he also have other options if you want to
do it yourself; like a PCB, or parts kit.

Not sure what the status is at the moment --- it was some time ago that got

these.
Maybe an e-mail to the address on the web site might have answers?

73,

Johan, KC7WW

At 09:12 PM 9/8/00 -0400, you wrote:
>Johan:
>What do they cost??
>
>73,
>jim
>wb4gcs@amsat.org
>
>
>Johan Forrer wrote:
>
> > Mark,
> >
> > EasyDSP is a M56002 box designed and manufactured by DF6JB specifically
> > for use in radio environments. Supports four radio ports that can be
> > switched by software, also features maxed-out memory complement for a
> > 56002.
> >
> > It runs the usual collection of EVM code (with minor mods.)
> > I have two of them in use and am most impressed by the detail given to RFI
> > shielding and mechanical rigidity. These are really beautifully made
> > units. I displayed them at last year's DCC and several folks stopped to
> > admire them.
> >
> > 73,
> >
> > Johan, KC7WW
> >
> > On Fri, 8 Sep 2000, Mark L. Hammond wrote:
> >
> > > Found this with a quick search:
> > >
> > > http://ourworld.compuserve.com/homepages/df6jb/df6jb_mode.htm#BPSK400
> > >
> > > What is an "EasyDSP" anyhow?
> > >
> > > 73,
> > >
> > > Mark
> > >
> > > At 03:01 PM 9/8/2000 -0400, you wrote:
> > > >At 08:39 PM 9/8/2000 +0200, Ray Suban wrote:
> > > >>Modem code for the 400 Baud Phase III telemetry has been written
> for the EVM
> > > >>56002 by DF6JB. I do not remember where I downloaded the code. I
> > > >>modified the
> > > >>code to use the Leonid monitor and I can upload the code to the
> tapr ftp site
> > > >>
> > > >>73
> > > >>Ray
> > > >
> > > >Thanks!! Does it grab the full 514 bytes??? I can test it if you can
> > > >send it to me. In addition to an *.obj file, I'd love to see the
> source code.
> > > >
> > > >
> > > >
> > > >--
> > > >____
> > > >Stacey E. Mills, M.D. WEB: http://www.people.virginia.edu/~sem2r/
> > > >Charlottesville, VA   E-Mail: sem2r@virginia.edu or w4sm@cstone.net
> > > >   Office Phone: 804-982-4406 Fax: 804-924-8767
> > > >____
> > > >
> > > >
> > > >---
> > > >You are currently subscribed to dsp as: hammond@surrealnet.net
> > > >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> > > >
> > >

> > >
> > > Mark L. Hammond [N8MH]
> > >
> > >
> > > ---
> > > You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
> > > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> > >
> >
> > ---
> > You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

24. [dsp] Phase III Telemetry code

From: Ray Suban <rays@waldonet.net.mt>
Date: Sat, 9 Sep 2000 19:25:38 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108388-2000.09.09-12.38.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have uploaded the code to the Tapr ftp site and placed it in /dsp/upload

73
Ray

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] Re: Phase III Telemetry code

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sat, 09 Sep 2000 18:17:01 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108425-2000.09.09-17.24.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

It's not available to the public from that site, at least at present.

Can you post somewhere else? I bet it's small. Otherwise, I'd love to get
it via email.

Thanks and 73,

Mark

At 07:25 PM 9/9/2000 +0200, you wrote:
>I have uploaded the code to the Tapr ftp site and placed it in /dsp/upload
>
>73
>Ray
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] Re: Phase III Telemetry code

From: w4sm@cstone.net (Stacey Mills)
Date: Sat, 09 Sep 2000 20:42:46 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108500-2000.09.10-01.34.02--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

At 07:25 PM 2000-09-09 +0200, you wrote:
>I have uploaded the code to the Tapr ftp site and placed it in /dsp/upload
>
>73
>Ray

Thanks, with a little effort, I reminded myself how to load my DSP56002EVM. I haven't messed with changing it since I flashed the ROM a couple years ago!!! At any rate, I got bios2 and your program loaded directly with the loader program, not through the FLASH, and I got it running. To do this I reassembled the *.asm file as a *.cld file (instead of a*.lod file) using the assembler that comes with the DSP. For input, I used a one block "synthesized" wave file of 400 baud PSK that I have, which has been shown to decode excellently with either the G3RUH demodulator or the DSP-93.

The output appears to be at 19k2 bps.... took me a minute to figure that out. Ideally, it should be at 1200 bps to be compatible with all the other demodulators.

The block starts to decode fine, but after about 8-10 characters it "frame shifts" and the rest of the block is non-readable. I may be doing something wrong. I checked my setup with the DSP-93 and got perfect decoding....

I do see at the beginning of the source code where where the "length" variable can be changed from 512 to 514.

Any suggestions appreciated.

--
_____
Stacey E. Mills, W4SM WWW: http://www.cstone.net/~w4sm/ham1.html
Charlottesville, VA PGP key: http://www.cstone.net/~w4sm/key
_____

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

27. [dsp] DCC Update 9/11/2000

From: "Steven R. Bible" <srbible@gate.net>
Date: Mon, 11 Sep 2000 12:33:40 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108744-2000.09.11-11.41.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

19th Annual ARRL/TAPR Digital Communications Conference
Orlando, FL □ September 22-24, 2000

** Update 9/11/2000 **

A little more that one week away, the 19th Annual ARRL/TAPR Digital Communications Conference is about to begin. For detailed information about the conference, please visit the official DCC web page at http:www.tapr.org/dcc.

Registration for the conference will be taken at the door. Friday registration is for an entire afternoon APRS activities, demonstrations, and presentations. Saturday registration includes conference proceedings, lunch, and a full day of presentations. Saturday night includes Banquet, dinner speaker, and prize drawing. Sunday registration is for the PICmicro Design seminar.

Banquet Prize Drawings:
Grand Prize □ Kenwood TM-D700A (donated by Kenwood)
2nd Grand Prize □ Palm VII Personal Digital Assistant
Two Motorola Oncore M12 GPS Evaluation Kits (donated by Synergy Systems, LLC)

Map and coordinates:
A map of the conference hotel and coordinates are available at ftp://ftp.tapr.org/dcc/dcc.hotel.map.pdf

Speakers:
The following is a list of presenters. Preliminary schedule is available

from ftp://ftp.tapr.org/dcc/2000.dcc.schedule.pdf

APRS Seminar - Friday September 22, 2000

John Ackerman, N9UR APRS WG
Steve Bible, N7HPR T-238 Weather Station
John Blowsky, KB2SCS APRS LOOKUP
Steve Bragg, KA9MVA HamHud
Bob Bruninga, WB4APR APRSdos, satellite, etc.
Steve Dimse, K4HG Internet APRS
Walter Dunckel, KD6VYV Serial Control of D7/D700
John Hansen, W2FS KISS TNC, D700 Keyboard
Dale Huguley, KG5QD Weather Server
Larry Gahagan, AB0JM Wildfire Support
Byon Garranrant, N6BG TinyTrack
Mike Musick, N0QBF PalmAPRS/Tracker construction
Robert Osband, N4SCY Public Service with APRS
Tom Schaefer, NY4I APRS Email Gateway
Darryl Smith, VK2TDS APRS in the 2000 Olympics
The Sprouls, WU2Z/KB2ICI Mac/Win/XAPRS
Rob Wittner, KZ5RW APRS-CE

Main Session, Paper Presentation - Saturday 23, 2000
Titles and abstracts are available at
http://www.tapr.org/tapr/html/Fcnc19.html

EasyTrak, A PIC Based Rotor/Radio Controller Interface
By Steve Bible N7HPR

APRS Tiny Web Pages
By Bob Bruninga WB4APR

Channel Capacity Simulation of Peer-to-Peer Spread Spectrum Satellite
Transponders
By Matthew Ettus N2MJI

Correlation for Direct Sequence Spread Spectrum
By Panagiotis Gavalas

PIC-et Radio II: How to Receive AX.25 UI Frames Using Inexpensive PIC
Microcontrollers
By John A. Hansen W2FS

Winlink 2000 ...A Global Ham Message Transfer and Deliver Network
By Hans Kessler N8PGR, Vic Poor W5SMM, Rick Muething KN6KZB, and Steve
Waterman K4CJX

Frequency Offset Acquisition and Tracking Algorithms, Part 1 and Part 2
By Mohamed K. Nezami

External Common Gateway Interface (CGI) Access to FindU
By Thomas M. Schaefer NY4I

Server Applications within APRS Internet Server Environment
By Thomas M. Schaefer NY4I

APRS and the TAPR EasyTrak Az/El Rotor Control System
By Keith Sproul WU2Z

APRS and Kenwood TM-D700 Voice Messaging
By Keith Sproul WU2Z and Mark Sproul KB2ICI

Internet Wide Callsign Database using LDAP
By Mark Sproul KB2ICI

Automatic Voice Relay System
By Bob Bruninga WB4APR

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28. [dsp] Re: DCC Update 9/11/2000

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 11 Sep 2000 12:58:09 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-108750-2000.09.11-12.05.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>
>EasyTrak, A PIC Based Rotor/Radio Controller Interface
>By Steve Bible N7HPR
>//
>APRS and the TAPR EasyTrak Az/El Rotor Control System
>By Keith Sproul WU2Z

Ooo...neat! Is there anymore information available to the public on these
yet (just read the abstract), or do we have to wait until the meeting is over?

Can't wait to hear/read more about these.

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

29. [dsp] Re: DCC Update 9/11/2000

From: "Steven R. Bible" <srbible@gate.net>
Date: Mon, 11 Sep 2000 13:28:14 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108753-2000.09.11-12.35.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> >EasyTrak, A PIC Based Rotor/Radio Controller Interface
> >By Steve Bible N7HPR
> >//
> >APRS and the TAPR EasyTrak Az/El Rotor Control System
> >By Keith Sproul WU2Z
>
> Ooo...neat! Is there anymore information available to the public
> on these
> yet (just read the abstract), or do we have to wait until the
> meeting is over?
>
> Can't wait to hear/read more about these.

Hmmm, let's see... How can I keep the anticipation high? :-). You ought to
go to the DCC!

Take a look at http://www.tapr.org/~n7hpr/easytrak/. The web pages are
still preliminary. You'll see a special design that I did for Ron Ross,
KE6JAB, that he will take to Antarctica in November of this year.

There will be a complete demo of EasyTrak tracking satellites and tuning
radios, plus a demo of APRS tracking objects (balloons, cars, cats, dogs
:-).

If you can't attend, the DCC proceedings can be purchased from ARRL or TAPR.
If all goes well, conference audio will be posted after the DCC, just as in
past years.

Also, recommend moving the discussion to PICSIG.

- Steve, N7HPR

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

30. [dsp] 56002 EVM and 400 bpsk update

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 11 Sep 2000 14:15:16 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108759-2000.09.11-13.22.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello all,

Yesterday Stacey W4SM and I exchanged several emails playing with 400 bpsk
code for the 56002 EVM supplied by Ray Suban.

We found a few things out, but the take-home lesson is that it appears to
work--even with the 514 byte blocks.

Stacey sent me two .wav files--one containing a string of text and numbers,
and another that is apparently from P3D (I think this is right...I'm doing
this from memory which is sometimes a bit hazardous...). My basic setup
was to play the wave, sending the audio out of the soundcard straight into
the IN jack on the EVM, and to use Hyperterminal as a dumb terminal to
watch the EVM serial output. These simple tests proved to be useful, and
the code seems to work fine. We were both able to change the "length"
parameter in the .asm file from 512 to 514, and it still worked. So, I
think we EVM owners are in good shape to help watch P3D after launch.

Some other particulars--this was done using Doug NA1DB's current set of
code files, with our EVMs running at 80MHz and 57600 serial port speed.

About the only strange thing we saw was that Stacey had bad copy using
Winamp to play the waves. I told him I used Windows Media Player 7; he was
able to get perfect copy when he also used Media Player.

Let's hope for a successful launch soon!

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

31. [dsp] Re: DCC Update 9/11/2000

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 11 Sep 2000 14:37:38 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108767-2000.09.11-13.45.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

If you look at http://members.bellatlantic.net/~dougnad/software/antpic.asm,
you will find PIC program I wrote a while back, to control rotors from a
serial port using an ICOM CI-V compatible protocol. It is rather simple, but
it has the advantage that it can share a serial port with
an ICOM radio.

Doug
NA1DB

At 12:58 PM 9/11/00 -0400, you wrote:

>>EasyTrak, A PIC Based Rotor/Radio Controller Interface
>>By Steve Bible N7HPR
>>//
>>APRS and the TAPR EasyTrak Az/El Rotor Control System
>>By Keith Sproul WU2Z
>
>Ooo...neat! Is there anymore information available to the public on these yet (just read the
abstract), or do we have to wait until the meeting is over?
>
>Can't wait to hear/read more about these.
>
>73,
>
>
>Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

32. [dsp] Re: DCC Update 9/11/2000

From: Jim Sanford <wb4gcs@amsat.org>
Date: Mon, 11 Sep 2000 19:08:47 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108792-2000.09.11-18.17.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Doug:
I took a look, good code, thanks for sharing.

Question: It's not obvious to me where the comparison of ordered and actual position is done. OR does this just control the relays with something else doing
the comparison?

Thanks & 73,
jim
wb4gcs@amsat.org

Douglas Braun & Nadia Papakonstantinou wrote:

> If you look at http://members.bellatlantic.net/~dougnad/software/antpic.asm,
> you will find PIC program I wrote a while back, to control rotors from a
> serial port using an ICOM CI-V compatible protocol. It is rather simple, but
> it has the advantage that it can share a serial port with
> an ICOM radio.
>
> Doug
> NA1DB
>
> At 12:58 PM 9/11/00 -0400, you wrote:
>
> >>EasyTrak, A PIC Based Rotor/Radio Controller Interface
> >>By Steve Bible N7HPR
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> >Can't wait to hear/read more about these.
> >
> >73,
> >
> >
> >Mark L. Hammond [N8MH]
>
> ---
> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
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---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

33. [dsp] Re: DCC Update 9/11/2000

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 11 Sep 2000 19:24:20 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108798-2000.09.11-18.31.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Also: the controlling software for the whole thing
is in another package on my Web site.

It is insanely complex: Unix-based tracking program talks
to PC-based rotor controller program via TCP-/IP, which
talks to PIC via CI-V serial line....

Doug

At 07:08 PM 9/11/00 -0400, you wrote:
>Doug:
>I took a look, good code, thanks for sharing.
>
>Question: It's not obvious to me where the comparison of ordered and actual position is done. OR does
 this just control the relays with something else doing

>the comparison?
>
>Thanks & 73,
>jim
>wb4gcs@amsat.org
>
>
>Douglas Braun & Nadia Papakonstantinou wrote:
>
> > If you look at http://members.bellatlantic.net/~dougnad/software/antpic.asm,
> > you will find PIC program I wrote a while back, to control rotors from a
> > serial port using an ICOM CI-V compatible protocol. It is rather simple, but
> > it has the advantage that it can share a serial port with
> > an ICOM radio.
> >
> > Doug
> > NA1DB
> >
> > At 12:58 PM 9/11/00 -0400, you wrote:
> >
> > >>EasyTrak, A PIC Based Rotor/Radio Controller Interface
> > >>By Steve Bible N7HPR
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> > >>APRS and the TAPR EasyTrak Az/El Rotor Control System
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> > >73,
> > >
> > >
> > >Mark L. Hammond [N8MH]
> >
> > ---
> > You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

34. [dsp] Re: DCC Update 9/11/2000

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 11 Sep 2000 19:22:14 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108799-2000.09.11-18.34.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The second answer is correct.   On my (former) rotors,
the motors moved at a constant rate, and the timing
was controlled by whatever sent the commands to the PIC.

The PIC code is really just a CI-V to "relay on-off"
translator.

Doug

At 07:08 PM 9/11/00 -0400, you wrote:
>Doug:
>I took a look, good code, thanks for sharing.
>
>Question: It's not obvious to me where the comparison of ordered and actual position is done. OR does
 this just control the relays with something else doing
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>Thanks & 73,
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>wb4gcs@amsat.org
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> > >73,
> > >
> > >
> > >Mark L. Hammond [N8MH]
> >
> > ---
> > You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

35. [dsp] Re: DCC Update 9/11/2000

From: Jim Sanford <wb4gcs@amsat.org>
Date: Mon, 11 Sep 2000 19:53:52 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108807-2000.09.11-19.01.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Doug:
Thanks much. Roger the limitation. This code is still very useful; gave me some ideas for a completely
 different project. Really appreciate you sharing.

Incidentally, what assembler do you use for PIC's??

73,
Jim
wb4gcs@amsat.org

Douglas Braun & Nadia Papakonstantinou wrote:

> Also: the controlling software for the whole thing
> is in another package on my Web site.
>
> It is insanely complex: Unix-based tracking program talks
> to PC-based rotor controller program via TCP-/IP, which
> talks to PIC via CI-V serial line....
>
> Doug
>
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> >I took a look, good code, thanks for sharing.
> >
> >Question: It's not obvious to me where the comparison of ordered and actual position is done. OR
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> >the comparison?
> >

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> >jim
> >wb4gcs@amsat.org
> >
> >
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> > > Doug
> > > NA1DB
> > >
> > > At 12:58 PM 9/11/00 -0400, you wrote:
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> > > >Can't wait to hear/read more about these.
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> > > >73,
> > > >
> > > >
> > > >Mark L. Hammond [N8MH]
> > >
> > > ---
> > > You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> > > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >
> >---
> >You are currently subscribed to dsp as: dougnad@bellatlantic.net
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
> ---
> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

36. [dsp] RE: 56002 EVM and 400 bpsk update

From: "Myszka, Mike" <mmyszka@hiwaay.net>
Date: Mon, 11 Sep 2000 21:23:59 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108837-2000.09.11-21.32.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I tried downloading the code from the TAPR ftp site, but had no luck. Am I
missing something? i am still new at learning the EVM and DSP in general.
The phase IIID telemetry sounds like a neat thing to play with. Where can I
get the code and the sample audio files mentioned?

Thanks in advance,
Mike (KE4RNB)

> -----Original Message-----
> From: bounce-dsp-15875@lists.tapr.org
> [mailto:bounce-dsp-15875@lists.tapr.org]On Behalf Of Mark L. Hammond
> Sent: Monday, September 11, 2000 13:15 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] 56002 EVM and 400 bpsk update
>
>
> Hello all,
>
> Yesterday Stacey W4SM and I exchanged several emails playing with
> 400 bpsk

> code for the 56002 EVM supplied by Ray Suban.
>
> We found a few things out, but the take-home lesson is that it appears to
> work--even with the 514 byte blocks.
>
> Stacey sent me two .wav files--one containing a string of text
> and numbers,
> and another that is apparently from P3D (I think this is
> right...I'm doing
> this from memory which is sometimes a bit hazardous...). My basic setup
> was to play the wave, sending the audio out of the soundcard
> straight into
> the IN jack on the EVM, and to use Hyperterminal as a dumb terminal to
> watch the EVM serial output. These simple tests proved to be useful, and
> the code seems to work fine. We were both able to change the "length"
> parameter in the .asm file from 512 to 514, and it still worked. So, I
> think we EVM owners are in good shape to help watch P3D after launch.
>
> Some other particulars--this was done using Doug NA1DB's current set of
> code files, with our EVMs running at 80MHz and 57600 serial port speed.
>
> About the only strange thing we saw was that Stacey had bad copy using
> Winamp to play the waves. I told him I used Windows Media Player
> 7; he was
> able to get perfect copy when he also used Media Player.
>
> Let's hope for a successful launch soon!
>
> 73,
>
>
>
> Mark L. Hammond [N8MH]
>
>
> ---
> You are currently subscribed to dsp as: mmyszka@hiwaay.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

37. [dsp] RE: 56002 EVM and 400 bpsk update

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Tue, 12 Sep 2000 07:25:58 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108906-2000.09.12-06.33.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Mike,

Apparently the file priviledges haven't been changed, so basically you
can't dload it from ftp.tapr.org yet.

I just posted the file on my server--you can grab it here:

http://camel.campbell.edu/~hammond/ham/bpsk400.zip

When I get home tonight, with Stacey's permission I'll post the audio wave
files, too.

If you need some help with the basic operation of the 56002EVM, let me
know---I'll try and help. If you need help with coding, somebody else on
the list can help ;-)

73,

Mark N8MH

At 09:23 PM 9/11/00 -0500, you wrote:
>I tried downloading the code from the TAPR ftp site, but had no luck. Am I
>missing something? i am still new at learning the EVM and DSP in general.
>The phase IIID telemetry sounds like a neat thing to play with. Where can I
>get the code and the sample audio files mentioned?

>
>Thanks in advance,
>Mike (KE4RNB)
>
> > -----Original Message-----
> > From: bounce-dsp-15875@lists.tapr.org
> > [mailto:bounce-dsp-15875@lists.tapr.org]On Behalf Of Mark L. Hammond
> > Sent: Monday, September 11, 2000 13:15 PM
> > To: TAPR DSP Special Interest Group
> > Subject: [dsp] 56002 EVM and 400 bpsk update
> >
> >
> > Hello all,
> >
> > Yesterday Stacey W4SM and I exchanged several emails playing with
> > 400 bpsk
> > code for the 56002 EVM supplied by Ray Suban.
> >
> > We found a few things out, but the take-home lesson is that it appears to
> > work--even with the 514 byte blocks.
> >
> > Stacey sent me two .wav files--one containing a string of text
> > and numbers,
> > and another that is apparently from P3D (I think this is
> > right...I'm doing
> > this from memory which is sometimes a bit hazardous...). My basic setup
> > was to play the wave, sending the audio out of the soundcard
> > straight into
> > the IN jack on the EVM, and to use Hyperterminal as a dumb terminal to
> > watch the EVM serial output. These simple tests proved to be useful, and
> > the code seems to work fine. We were both able to change the "length"
> > parameter in the .asm file from 512 to 514, and it still worked. So, I
> > think we EVM owners are in good shape to help watch P3D after launch.
> >
> > Some other particulars--this was done using Doug NA1DB's current set of
> > code files, with our EVMs running at 80MHz and 57600 serial port speed.
> >
> > About the only strange thing we saw was that Stacey had bad copy using
> > Winamp to play the waves. I told him I used Windows Media Player
> > 7; he was
> > able to get perfect copy when he also used Media Player.
> >
> > Let's hope for a successful launch soon!
> >
> > 73,
> >
> >
> >
> > Mark L. Hammond [N8MH]
> >
> >
> > ---
> > You are currently subscribed to dsp as: mmyszka@hiwaay.net
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

38. [dsp] RE: 56002 EVM and 400 bpsk update

From: "Stacey E. Mills, M.D." <w4sm@cstone.net>
Date: Tue, 12 Sep 2000 09:13:15 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108913-2000.09.12-08.21.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 07:25 AM 9/12/2000 -0400, you wrote:
>Hello Mike,
>

>Apparently the file priviledges haven't been changed, so basically you
>can't dload it from ftp.tapr.org yet.
>
>I just posted the file on my server--you can grab it here:
>
>http://camel.campbell.edu/~hammond/ham/bpsk400.zip
>
>When I get home tonight, with Stacey's permission I'll post the audio wave
>files, too.

Sure, feel free to post them.

--
____
Stacey E. Mills, M.D. WEB: http://www.people.virginia.edu/~sem2r/
Charlottesville, VA   E-Mail: sem2r@virginia.edu or w4sm@cstone.net
                         Office Phone: 804-982-4406 Fax: 804-924-8767
____

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

39. [dsp] RE: Phase III Telemetry code

From: "Steven R. Bible" <srbible@gate.net>
Date: Tue, 12 Sep 2000 09:56:45 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-108924-2000.09.12-09.04.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Tim must be asleep :-)

I've moved over

   bpsk400.txt
   bpsk400.zip

to

   ftp://ftp.tapr.org/dsp/Motorola/dsp56002/evm56k/

Enjoy,

 - Steve, N7HPR
   n7hpr@tapr.org

> -----Original Message-----
> From: bounce-dsp-3222@lists.tapr.org
> [mailto:bounce-dsp-3222@lists.tapr.org]On Behalf Of Ray Suban
> Sent: Saturday, September 09, 2000 1:26 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] Phase III Telemetry code
>
>
> I have uploaded the code to the Tapr ftp site and placed it in /dsp/upload
>
> 73
> Ray
>
> ---
> You are currently subscribed to dsp as: SRBIBLE@GATE.NET
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

40. [dsp] 400 bpsk sound waves posted

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Tue, 12 Sep 2000 20:57:58 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-108990-2000.09.12-20.05.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I just uploaded the sound files for those interested in testing the
DSP56002EVM with the recently posted 400 bpsk modem code.

You can grab the file here for now:

http:\\camel.campbell.edu\~hammond\ham\400bpsk_wav.zip

I also uploaded the same file to dsp\uploads at ftp.tapr.org. Once it gets
moved, it will be available there, too.

Thanks to Stacey for the waves...

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

41. [dsp] RE: 400 bpsk sound waves posted

From: "Steven R. Bible" <srbible@gate.net>
Date: Wed, 13 Sep 2000 10:13:57 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-109086-2000.09.13-09.21.46--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have moved

  400bpsk_wav.txt
  400bpsk_wav.zip

to

  ftp://ftp.tapr.org/dsp/Motorola/dsp56002/evm56k/

Enjoy!

 - Steve, N7HPR
   n7hpr@tapr.org

> -----Original Message-----
> From: bounce-dsp-3222@lists.tapr.org
> [mailto:bounce-dsp-3222@lists.tapr.org]On Behalf Of Mark L. Hammond
> Sent: Tuesday, September 12, 2000 8:58 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] 400 bpsk sound waves posted
>
>
> I just uploaded the sound files for those interested in testing the
> DSP56002EVM with the recently posted 400 bpsk modem code.
>
> You can grab the file here for now:
>
> http:\\camel.campbell.edu\~hammond\ham\400bpsk_wav.zip
>
>
> I also uploaded the same file to dsp\uploads at ftp.tapr.org.
> Once it gets
> moved, it will be available there, too.
>
> Thanks to Stacey for the waves...
>
> 73,
>
> Mark L. Hammond [N8MH]
>
>
> ---
> You are currently subscribed to dsp as: SRBIBLE@GATE.NET
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

42. [dsp] 'C6x development tools?

From: Major A <andras@users.sourceforge.net>
Date: Sun, 17 Sep 2000 17:01:08 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-109794-2000.09.17-11.08.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I wonder whether anyone of you has tried to develop software for the
Texas Instriuments 'C6x DSP family. If so, are free tools available? I
don't like the idea of having to buy TI's Code Composer Studio.

Having at least an assembler for free would be very nice.

Cheers,

    Andras DL9SEK

==
Major Andras
    e-mail: 1. andras@users.sourceforge.net
            2. andras@physcip.uni-stuttgart.de
    www: http://www.physcip.uni-stuttgart.de/andras
==

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

43. [dsp] Final Update - DCC Orlando, FL Sep 22-24, 2000

From: "Steven R. Bible" <srbible@gate.net>
Date: Mon, 18 Sep 2000 12:33:39 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-109955-2000.09.18-11.43.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

19th Annual ARRL/TAPR Digital Communications Conference
Orlando, FL □ September 22-24, 2000

** Final Update 9/18/2000 **

Counting down the final days until the 19th Annual ARRL/TAPR Digital
Communications Conference this weekend in Orlando, Florida. For detailed
information about the conference, please visit the official DCC web page at
http:www.tapr.org/dcc.

Registration for the conference will be taken at the door. Friday
registration is for an entire afternoon APRS activities, demonstrations, and
presentations. Saturday registration includes conference proceedings,
lunch, and a full day of presentations. Saturday night includes Banquet,
dinner speaker, and prize drawing. Sunday registration is for the PICmicro
Design seminar.

DCC Social:
Please join us Friday evening at 7:00 PM for a social get together time.
The social is generously hosted by the Packet Radio Users Group of Japan
(PRUG).

PRUG Presentation:
Friday night the Packet Radio Users Group of Japan will present talks on
their progress on high-speed digital networks in Japan.

Saturday Night Banquet Speaker:
Mr. Doug Campbell, of Triton Network Systems (http://www.triton-network.com)
will be our DCC Banquet Speaker. Triton Network Systems is located in
Orlando, Florida.

Vice President Product Management, Marketing, & International Business as
Vice President of International Sales, Marketing and Product Management, Mr.
Campbell leads the assessment of global community needs and spearheads the
development of Triton Network Systems' product and marketing strategies.

Mr. Campbell cultivated his management skills in sales, marketing and
product development working 17 years for Nortel Networks. While based in
Singapore, he built a multifunctional pan-Asian team, which successfully

captured a 100% market share with MCI-WorldCom Asia, successfully introducing a number of new products. Prior to this, Mr. Campbell was instrumental in the establishment of an SDH broadband equipment joint venture in China and served as a member of the company's Board of Directors.

Mr. Campbell received a Bachelor of Engineering Physics degree from the Royal Military College of Canada in Kingston, Canada, and a Master of Business Administration from IMD (University of Lausanne) in Switzerland.

Banquet Prize Drawings:
Grand Prize Kenwood TM-D700A (donated by Kenwood)
2nd Grand Prize Palm VII Personal Digital Assistant (donated by TAPR)
Two Motorola Oncore M12 GPS Evaluation Kits (donated by Synergy Systems, LLC)
Microchip PICSTART-PLUS PICmicro Programmer (donated by Microchip)

PIC Seminar Prize Drawing
Microchip MPLAB-ICD (donated by Microchip)

Project and Demonstration Room:
The DCC is a place where people can talk about their projects and gain ideas for new ones. The Project and Demonstration Room has become a recent DCC tradition where people can bring and display their projects. The room will be located next to the registration room and across the hall from the main presentation room. The Project and Demonstration Room will open at registration time and be closed (locked) 11:00 PM Friday and Saturday night.

Map and coordinates:
A map of the conference hotel and coordinates are available at
ftp://ftp.tapr.org/dcc/2000.dcc.hotel.map.pdf

Speakers:
The following is a list of presenters. PDF version available from
ftp://ftp.tapr.org/dcc/2000.dcc.speakers.pdf

Speaking schedule (subject to change) is available from
ftp://ftp.tapr.org/dcc/2000.dcc.schedule.pdf

APRS Seminar - Friday September 22, 2000

John Ackerman, N9UR	APRS WG
Steve Bible, N7HPR	T-238 Weather Station
John Blowsky, KB2SCS	APRS LOOKUP
Bob Bruninga, WB4APR	APRSdos, satellite, etc.
Steve Dimse, K4HG	Internet APRS
Walter Dunckel, KD6VYV	Serial Control of D7/D700
John Hansen, W2FS	KISS TNC, D700 Keyboard
Dale Huguley, KG5QD	Weather Server
Larry Gahagan, AB0JM	Wildfire Support
Byon Garranrant, N6BG	TinyTrack
Mike Musick, N0QBF	PalmAPRS/Tracker construction
Robert Osband, N4SCY	Public Service with APRS
Tom Schaefer, NY4I	APRS Email Gateway
Darryl Smith, VK2TDS	APRS in the 2000 Olympics
The Sprouls, WU2Z/KB2ICI	Mac/Win/XAPRS
Rob Wittner, KZ5RW	APRS-CE

Main Session, Paper Presentation - Saturday 23, 2000
Titles and abstracts are available at
http://www.tapr.org/tapr/html/Fcnc19.html

EasyTrak, A PIC Based Rotor/Radio Controller Interface
By Steve Bible N7HPR

APRS Tiny Web Pages
By Bob Bruninga WB4APR

Channel Capacity Simulation of Peer-to-Peer Spread Spectrum Satellite Transponders
By Matthew Ettus N2MJI

Correlation for Direct Sequence Spread Spectrum
By Panagiotis Gavalas

PIC-et Radio II: How to Receive AX.25 UI Frames Using Inexpensive PIC Microcontrollers
By John A. Hansen W2FS

Winlink 2000 ...A Global Ham Message Transfer and Deliver Network

By Hans Kessler N8PGR, Vic Poor W5SMM, Rick Muething KN6KZB, and Steve
Waterman K4CJX

Frequency Offset Acquisition and Tracking Algorithms, Part 1 and Part 2
By Mohamed K. Nezami

APRS and the TAPR EasyTrak Az/El Rotor Control System
By Keith Sproul WU2Z

APRS and Kenwood TM-D700 Voice Messaging
By Keith Sproul WU2Z and Mark Sproul KB2ICI

Internet Wide Callsign Database using LDAP
By Mark Sproul KB2ICI

Automatic Voice Relay System
By Bob Bruninga WB4APR

Introductory Sessions - Saturday 23, 2000

Intro to Packet Radio
By John Ackerman, N8UR

Intro to APRS
By Guy Story, KC5QOI

Intro to Digital Satellites
By Barry Baines, WD4ASW

Into to HF Digital
TBD

Intro to Software Defined Radios
By Steve Bible, N7HPR

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

44. [dsp] FS: Motorola DSP56002EVM

From: Ken Harris <KHarri4@attglobal.net>
Date: Tue, 26 Sep 2000 15:05:40 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-111356-2000.09.26-17.13.57--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

For sale: Motorola DSP56002EVM
        Includes Manuals, EEPROM

        $80 obo

The Motorola DSP56002EVM is a low-cost, powerful DSP evaluation module
(EVM)
intended for those experimenting with digital signal processing (DSP)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

45. [dsp] Re: FS: Motorola DSP56002EVM

From: "Brian D Heaton" <bdheaton@c4i2.com>
Date: Tue, 26 Sep 2000 18:42:21 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-111387-2000.09.26-19.51.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Ken,

    If it's still available I'll take it. Do you prefer MO or are you on
PayPal???

                73, N5VFF/Brian

----- Original Message -----
From: "Ken Harris" <KHarri4@attglobal.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Sent: Tuesday, September 26, 2000 16:05
Subject: [dsp] FS: Motorola DSP56002EVM

>
>   For sale: Motorola DSP56002EVM
>   Includes Manuals, EEPROM
>
> $80 obo
>
> The Motorola DSP56002EVM is a low-cost, powerful DSP evaluation module
> (EVM)
> intended for those experimenting with digital signal processing (DSP)
>
> ---
> You are currently subscribed to dsp as: bdheaton@c4i2.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

46. [dsp] Re: FS: Motorola DSP56002EVM

From: "Brian D Heaton" <bdheaton@c4i2.com>
Date: Tue, 26 Sep 2000 19:01:49 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-111398-2000.09.26-20.12.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

That wasn't my brightest maneuver of the day! My apologies to the list.....

            THX/BDH

----- Original Message -----
From: "Brian D Heaton" <bdheaton@c4i2.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, September 26, 2000 18:42
Subject: [dsp] Re: FS: Motorola DSP56002EVM

> Ken,
>
>   If it's still available I'll take it. Do you prefer MO or are you on
> PayPal???
>
>   73, N5VFF/Brian
>
> ----- Original Message -----
> From: "Ken Harris" <KHarri4@attglobal.net>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Tuesday, September 26, 2000 16:05
> Subject: [dsp] FS: Motorola DSP56002EVM
>
>
> >
> >   For sale: Motorola DSP56002EVM
> >   Includes Manuals, EEPROM
> >
> > $80 obo
> >
> > The Motorola DSP56002EVM is a low-cost, powerful DSP evaluation module
> > (EVM)
> > intended for those experimenting with digital signal processing (DSP)
> >
> > ---
> > You are currently subscribed to dsp as: bdheaton@c4i2.com
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
>
>
> ---
> You are currently subscribed to dsp as: bdheaton@c4i2.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

47. [dsp] Re: [amsat-bb] Re: P3D 9K6 downlink format

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sat, 30 Sep 2000 21:30:08 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112070-2000.09.30-20.39.01--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Okay...I'll show my complete ignorance (again ;-)....

Would it be possible for somebody to whip something up for either the
DSP-93 or the EVM56002DSP chips? Or is only doable in hardware?

(I'm cross posting this to the TAPR DSP list as well)

73,

Mark N8MH

At 04:20 PM 9/30/2000, Richard W L Limebear wrote:
>Gang,
>
>since several people were interested in details of this I have copied the
>notes I made when G3RUH spoke about this at the Amsat-UK Colloquium. They
>can be seen on the Amsat-UK web site. At the moment there is no hyperlink
>to this page (I forgot) but I'll put one onto our P3D pages on Sunday. In
>the meantime go to: <http://www.uk.amsat.org/p3d_9k6.htm> for everything
>you need to know.
>
>G3RUH approved this publication but PLEASE *do not* send e-mails to him
>at present because he is writing the software for P3D. If anyone finds
>something there that they do not understand, I'm sure there are many people
>here on amsat-bb who will be able to help.
>
>73
>Richard W L Limebear G3RWL
>g3rwl@amsat.org
>FOC # 1188
>
>   So many beautiful girls ..... (sob) so little time
>----
>Via the amsat-bb mailing list at AMSAT.ORG courtesy of AMSAT-NA.
>To unsubscribe, send "unsubscribe amsat-bb" to Majordomo@amsat.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

October 2000

Original source file: dsp.0010
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0010

1. [dsp] Re: [amsat-bb] Re: P3D 9K6 downlink format

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sun, 01 Oct 2000 10:19:11 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112190-2000.10.01-12.27.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

It would be pretty easy to modify the G3RUH.ASM program to do this.
Only a few lines of code would have to be changed.

It would be nice if there was a test signal available to
use for debugging, though.

Doug Braun
NA1DB

At 09:30 PM 9/30/00 -0400, you wrote:
>Okay...I'll show my complete ignorance (again ;-)....
>
>Would it be possible for somebody to whip something up for either the DSP-93 or the EVM56002DSP chips?
  Or is only doable in hardware?
>
>(I'm cross posting this to the TAPR DSP list as well)
>
>73,
>
>Mark N8MH
>
>At 04:20 PM 9/30/2000, Richard W L Limebear wrote:
>>Gang,
>>
>>since several people were interested in details of this I have copied the
>>notes I made when G3RUH spoke about this at the Amsat-UK Colloquium. They
>>can be seen on the Amsat-UK web site. At the moment there is no hyperlink
>>to this page (I forgot) but I'll put one onto our P3D pages on Sunday. In
>>the meantime go to: <http://www.uk.amsat.org/p3d_9k6.htm> for everything
>>you need to know.
>>
>>G3RUH approved this publication but PLEASE *do not* send e-mails to him
>>at present because he is writing the software for P3D. If anyone finds
>>something there that they do not understand, I'm sure there are many people
>>here on amsat-bb who will be able to help.
>>
>>73
>>Richard W L Limebear G3RWL
>>g3rwl@amsat.org
>>FOC # 1188
>>
>>   So many beautiful girls ..... (sob) so little time
>>----
>>Via the amsat-bb mailing list at AMSAT.ORG courtesy of AMSAT-NA.
>>To unsubscribe, send "unsubscribe amsat-bb" to Majordomo@amsat.org
>
>
>Mark L. Hammond [N8MH]
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] DL format for loading *.lod files

From: w4sm@cstone.net (Stacey Mills)
Date: Sun, 01 Oct 2000 19:27:45 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112247-2000.10.01-18.41.01--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

Can someone point me to the source code for DL32.exe or DL.exe?
I need information on the handshaking, protocol, etc. that takes place
during the loading of a *.lod file into the DSP56002.

Thanks!

--

  ____
  Stacey E. Mills, W4SM   WWW: http://www.cstone.net/~w4sm/ham1.html
   Charlottesville, VA   PGP key: http://www.cstone.net/~w4sm/key
  ____

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: DL format for loading *.lod files

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sun, 01 Oct 2000 20:06:40 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112259-2000.10.01-19.15.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Go here for Doug NA1DB's 56k compatible version, with source:
http://members.bellatlantic.net/~dougnad/software/dl56k.zip

Go here for Nando CX6DD's version, with source:
http://chasque.apc.org/franky/dl32_56k.zip

73,

Mark N8MH

At 07:27 PM 10/1/2000, you wrote:

>Can someone point me to the source code for DL32.exe or DL.exe?
>I need information on the handshaking, protocol, etc. that takes place
>during the loading of a *.lod file into the DSP56002.
>
>Thanks!
>
>--
> ____
> Stacey E. Mills, W4SM   WWW: http://www.cstone.net/~w4sm/ham1.html
>   Charlottesville, VA   PGP key: http://www.cstone.net/~w4sm/key
> ____
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: DL format for loading *.lod files

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sun, 01 Oct 2000 20:30:05 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112267-2000.10.01-19.38.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Oh..and Doug has the 32bit version here, too:
http://members.bellatlantic.net/~dougnad/software/dl32.zip
http://members.bellatlantic.net/~dougnad/software/dl32src.zip

At 08:06 PM 10/1/2000, you wrote:
>Go here for Doug NA1DB's 56k compatible version, with source:
>http://members.bellatlantic.net/~dougnad/software/dl56k.zip
>
>
>Go here for Nando CX6DD's version, with source:
>http://chasque.apc.org/franky/dl32_56k.zip

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] DSP-12 - a good P3D 400 Bd TLM receive modem

From: Bent Bagger <bent.bagger@tellabs.com>
Date: Mon, 2 Oct 2000 09:25:58 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112353-2000.10.02-02.35.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Now is the time to dust of that DSP-12 which is sitting on your shelf and
prepare for the upcoming launch of P3D, because here is some good news for
all you DSP-12 owners: I have uploaded a modified version of the 400 Bd
PSK modem for the DSP-12 to the following URL:

ftp://ftp.tapr.org/dsp/Motorola/dsp56001/dsp-12.

The modification consists of a change to the software so that it sends 514
bytes rather than 512 to the listening program. In this way also the CRC
bytes will get transmitted to the listening program.

The modified modem has been tested by Stacey Mills, W4SM, and he has this
to say about the modem:

"I burned the new eproms and checked out the 400 baud PSK demodulator with
514 byte capacity. It works very well... Actually, very, very well. In
fact, doing some tests with some 400 baud PSK wave files that I have
generated, having a calibrated background noise, the DSP-12 functioned as
well or better than any other modem I have tested"

The file gce201.zip contains these files:

READ.ME
GCE.V40 - Executable that may be downloaded to the DSP-12
GCE.B - PROM image for the B-PROM. Checksum: $1900
GCE.D - PROM image for the D-PROM. Checksum: $5000
GCE.F - PROM image for the F-PROM. Checksum: $4900

Have fun.

Best 73 de Bent/OZ6BL
(also oz6bl@amsat.org)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: [amsat-bb] Re: P3D 9K6 downlink format

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 02 Oct 2000 13:10:42 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112416-2000.10.02-12.19.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am almost done whipping up a EVM version of the decoder.
I got a little fancy and added pseudo-transmit capability
(either from the serial port or from a repeating canned message).
Stay tuned.

Doug Braun
NA1DB

At 12:30 AM 10/1/00 -0400, you wrote:
>Okay...I'll show my complete ignorance (again ;-)....
>

>Would it be possible for somebody to whip something up for either the DSP-93 or the EVM56002DSP chips?
  Or is only doable in hardware?
>
>(I'm cross posting this to the TAPR DSP list as well)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: [amsat-bb] Re: P3D 9K6 downlink format

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 02 Oct 2000 14:30:12 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112422-2000.10.02-13.41.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Super!

As always, I'm willing to play guinea pig.

73,

Mark N8MH

At 01:10 PM 10/2/00 -0400, you wrote:
>I am almost done whipping up a EVM version of the decoder.
>I got a little fancy and added pseudo-transmit capability
>(either from the serial port or from a repeating canned message).
>Stay tuned.
>
>Doug Braun
>NA1DB

> >Would it be possible for somebody to whip something up for either the
> DSP-93 or the EVM56002DSP chips? Or is only doable in hardware?
> >

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] P3D 9K6 downlink modem for EVM

From: Douglas Braun NA1DB <dougnad@bellatlantic.net>
Date: Wed, 04 Oct 2000 10:15:10 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: hammond@surrealnet.net
Message-ID: <LYR3532-112806-2000.10.04-09.23.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

At www.dougbraun.com you will find a link to a first version
of a P3D telemetry decoder modem for the EVM. The file name is "p3d.asm".

This version seems to have some problem with the symbol synchronization,
though. I have compared the code line-for-line with the g3ruh.asm code
it is based on, and I cannot find any discrepancy, though.

The modem has a couple of options for generating a test output signal.
It can "transmit" data it gets from the serial port, or it can
repeatedly send a canned message. You can either connect the EVM's
output and input jacks together, or you can record the output signal
and play it back later.

If you have successfully used the g3ruh.asm modem on your system,
you should not have any trouble figuring out how this one works.

As I post further revisions, I will post a message to this mailing list.

Doug
NAS1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] RE: dsp digest: October 04, 2000

From: "Alan K. Adamson" <ne1h@ne1h.dyndns.org>
Date: Thu, 5 Oct 2000 07:43:58 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112964-2000.10.05-06.52.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Doug,

I have the version that was release for the 56002 from the guy in DE land.
Don't know if you've seen it or not? Drop me back a note and I'll email it
over to you.

Alan

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] RE: dsp digest: October 04, 2000

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 05 Oct 2000 09:39:07 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-112978-2000.10.05-08.48.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Do you mean a modem for P3D telemetry?
Thanks, I'd love to get a copy.
Besides, if there is already a working solution
for EVM owners, I would rather not spend all day
making a second one...

Doug

At 07:43 AM 10/5/00 -0400, you wrote:
>Doug,
>
>I have the version that was release for the 56002 from the guy in DE land.
>Don't know if you've seen it or not? Drop me back a note and I'll email it
>over to you.
>
>Alan
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] RE: dsp digest: October 04, 2000

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 05 Oct 2000 09:49:38 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dougnad@bellatlantic.net
Message-ID: <LYR3532-112985-2000.10.05-09.01.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Okay, maybe I can clarify?

There exists a P3D 400 BPSK telemetry decoder. That is the the "general
telemetry" that the satellite will send during routine operations. This is
the one I was testing with Stacey W4SM, using the audio .wav files he
provided, and I uploaded.

What I asked about several days ago was a telemetry decoder that can be
used right after launch to monitor the 9600 baud telemetry that will be
sent as right after the bird is turned on (or something like that...). The
reference link for this is here:

http://www.uk.amsat.org/p3d_9k6.htm

I thought Doug was working on the 9600 baud telemetry program that is
needed right after launch, to capture the raw telemetry data? Far as I

know, *this* code for the EVM has not been released yet...

Can anybody correct me if I'm wrong? (won't be the first time, nor the last ;-)

73,

Mark N8MH

At 09:39 AM 10/5/00 -0400, you wrote:
>Do you mean a modem for P3D telemetry?
>Thanks, I'd love to get a copy.
>Besides, if there is already a working solution
>for EVM owners, I would rather not spend all day
>making a second one...
>
>Doug
>
>At 07:43 AM 10/5/00 -0400, you wrote:
> >Doug,
> >
> >I have the version that was release for the 56002 from the guy in DE land.
> >Don't know if you've seen it or not? Drop me back a note and I'll email it
> >over to you.
> >
> >Alan
> >
> >
> >---
> >You are currently subscribed to dsp as: dougnad@bellatlantic.net
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] P3D Launch Telemetry Decoder for EVM Released!

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 05 Oct 2000 13:19:30 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: hammond@mail.surrealnet.net
Message-ID: <LYR3532-113004-2000.10.05-12.28.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

Surf over to www.dougbraun.com and you can fetch my (working)
P3D launch telemetry decoder for the EVM. This is a
special 9600 baud modem for only for P3D LAUNCH telemetry.

This took much longer than I thought to debug. The real problem
was actually a bug in the original G3RUH.ASM program. Whenever
the received signal phase was adjusted to improve the syncronization,
the transmit signal phase would get an equal and opposite adjustment.
This would not affect half-duplex operation, but when the modem was
trying to decode its own signal, it would drive itself crazy!
Eventually I will make the same fix to G3RUH.ASM. This
will probably improve its operation for satellite use, which
is full-duplex.

If you try to use this, please give me some feedback, preferably
BEFORE the P3D launch!

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] test results for -> P3D Launch Telemetry Decoder

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 05 Oct 2000 18:22:28 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-113038-2000.10.05-17.30.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Doug,

Thanks for sharing the new code!

A loopback test (IN jack connected to OUT jack with 3 conductor 1/8" stereo
audio cable) on my EVM56002 EVM/TAPR RI gives this...over, and over, and
over, and.......heh.

My results were using Hyperterminal in Win2kPro, 9600 baud, N81, no
handshaking.

```
##############################################
abcdefghijklmnopqrstuvwxyz0123456789!@#$%^&*()
P3D Launch Telemetry decoder program by NA1DB
##############################################
abcdefghijklmnopqrstuvwxyz0123456789!@#$%^&*()
P3D Launch Telemetry decoder program by NA1DB
##############################################
abcdefghijklmnopqrstuvwxyz0123456789!@#$%^&*()
P3D Launch Telemetry decoder program by NA1DB
##############################################
```

Not sure of what other test(s) to try. Does anybody have any suggestions??

73,

Mark N8MH

At 01:19 PM 10/5/2000, you wrote:
>Hello,
>
>Surf over to www.dougbraun.com and you can fetch my (working)
>P3D launch telemetry decoder for the EVM. This is a
>special 9600 baud modem for only for P3D LAUNCH telemetry.
>//
>If you try to use this, please give me some feedback, preferably
>BEFORE the P3D launch!
>
>Doug
>NA1DB

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] Re: test results for -> P3D Launch Telemetry Decoder

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 05 Oct 2000 18:32:30 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-113043-2000.10.05-17.41.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

If you have the ability to capture the output
and play it back later (e.g. thru a PC soundcard or a DAT recorder),
that would be very helpful.

My biggest fear is that I made a wrong assumption about the
data format, and the decoder is correctly decoding the wrong data :-)

Also, the canned message ought to have some non-printing characters
(i.e. the entire 8-bit range).

Doug

At 06:22 PM 10/5/00 -0400, you wrote:

>Not sure of what other test(s) to try. Does anybody have any suggestions??

>
>73,
>
>Mark N8MH

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] Re: test results for -> P3D Launch Telemetry Decoder

From: "Lyle Johnson" <wa7gxd@email.msn.com>
Date: Thu, 5 Oct 2000 15:43:27 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-113072-2000.10.05-17.53.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have an engineering model of the IHU-2 (the box that generates the 9600
FSK data on the spacecraft) and James' decoder that we used during testing
in England and at Kourou. This weekend I intend to set this up and verify
things here. If I can find the time, and my EVM(!), I will attempt to
verify Doug's code against the IHU-2 and James' demod.

No promises, but I'll try.

73,

Lyle

> -----Original Message-----
> From: bounce-dsp-14408@lists.tapr.org
> [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Douglas Braun &
> Nadia Papakonstantinou
> Sent: Thursday, October 05, 2000 3:33 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] Re: test results for -> P3D Launch Telemetry Decoder
>
>
> If you have the ability to capture the output
> and play it back later (e.g. thru a PC soundcard or a DAT recorder),
> that would be very helpful.
>
> My biggest fear is that I made a wrong assumption about the
> data format, and the decoder is correctly decoding the wrong data :-)
>
> Also, the canned message ought to have some non-printing characters
> (i.e. the entire 8-bit range).
>
>
> Doug
>
> At 06:22 PM 10/5/00 -0400, you wrote:
>
>
> >Not sure of what other test(s) to try. Does anybody have any
> suggestions??
> >
> >73,
> >
> >Mark N8MH
>
>
> ---
> You are currently subscribed to dsp as: wa7gxd@email.msn.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: test results for -> P3D Launch Telemetry Decoder

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 05 Oct 2000 18:50:47 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-113079-2000.10.05-18.00.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Wow, that would be super, Lyle.

I just recorded some output to my soundcard (SB16). Playback from the audio card into the EVM seems to display most of the data, but with errors. Not sure the cause (levels?) but I'll work on it. Have to run 2 kids to soccer now.

But it "sounds" like 9600 baud data ;-)

73,

Mark N8MH

At 06:43 PM 10/5/2000, you wrote:
>I have an engineering model of the IHU-2 (the box that generates the 9600
>FSK data on the spacecraft) and James' decoder that we used during testing
>in England and at Kourou. This weekend I intend to set this up and verify
>things here. If I can find the time, and my EVM(!), I will attempt to
>verify Doug's code against the IHU-2 and James' demod.
>
>No promises, but I'll try.
>
>73,
>
>Lyle
>
> > -----Original Message-----
> > From: bounce-dsp-14408@lists.tapr.org
> > [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Douglas Braun &
> > Nadia Papakonstantinou
> > Sent: Thursday, October 05, 2000 3:33 PM
> > To: TAPR DSP Special Interest Group
> > Subject: [dsp] Re: test results for -> P3D Launch Telemetry Decoder
> >
> >
> > If you have the ability to capture the output
> > and play it back later (e.g. thru a PC soundcard or a DAT recorder),
> > that would be very helpful.
> >
> > My biggest fear is that I made a wrong assumption about the
> > data format, and the decoder is correctly decoding the wrong data :-)
> >
> > Also, the canned message ought to have some non-printing characters
> > (i.e. the entire 8-bit range).
> >
> >
> > Doug
> >
> > At 06:22 PM 10/5/00 -0400, you wrote:
> >
> >
> > >Not sure of what other test(s) to try. Does anybody have any
> > suggestions??
> > >
> > >73,
> > >
> > >Mark N8MH

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] Re: test results for -> P3D Launch Telemetry Decoder

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 05 Oct 2000 19:50:29 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-113098-2000.10.05-18.59.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

If you do not use the highest possible sampling rate,
it definitely would not work. Actually, the EVM
itself is sampling at 48k samples/second, which is
higher than most soundcards go.

Doug

At 06:50 PM 10/5/00 -0400, you wrote:
>Wow, that would be super, Lyle.
>
>I just recorded some output to my soundcard (SB16). Playback from the audio card into the EVM seems to
 display most of the data, but with errors. Not sure the cause (levels?) but I'll work on it. Have to
run 2 kids to soccer now.
>
>But it "sounds" like 9600 baud data ;-)
>
>73,
>
>Mark N8MH
>
>At 06:43 PM 10/5/2000, you wrote:
>>I have an engineering model of the IHU-2 (the box that generates the 9600
>>FSK data on the spacecraft) and James' decoder that we used during testing
>>in England and at Kourou. This weekend I intend to set this up and verify
>>things here. If I can find the time, and my EVM(!), I will attempt to
>>verify Doug's code against the IHU-2 and James' demod.
>>
>>No promises, but I'll try.
>>
>>73,
>>
>>Lyle
>>
>> > -----Original Message-----
>> > From: bounce-dsp-14408@lists.tapr.org
>> > [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Douglas Braun &
>> > Nadia Papakonstantinou
>> > Sent: Thursday, October 05, 2000 3:33 PM
>> > To: TAPR DSP Special Interest Group
>> > Subject: [dsp] Re: test results for -> P3D Launch Telemetry Decoder
>> >
>> >
>> > If you have the ability to capture the output
>> > and play it back later (e.g. thru a PC soundcard or a DAT recorder),
>> > that would be very helpful.
>> >
>> > My biggest fear is that I made a wrong assumption about the
>> > data format, and the decoder is correctly decoding the wrong data :-)
>> >
>> > Also, the canned message ought to have some non-printing characters
>> > (i.e. the entire 8-bit range).
>> >
>> >
>> > Doug
>> >
>> > At 06:22 PM 10/5/00 -0400, you wrote:
>> >
>> >
>> > >Not sure of what other test(s) to try. Does anybody have any
>> > suggestions??
>> > >
>> > >73,
>> > >
>> > >Mark N8MH
>
>
>Mark L. Hammond [N8MH]
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] Re: test results for -> P3D Launch Telemetry Decoder

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 05 Oct 2000 20:34:11 -0400

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-113114-2000.10.05-19.43.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Sorry for being testy, it was one of those days where
nothing was going the way it was supposed to...

Doug

At 07:50 PM 10/5/00 -0400, you wrote:
>If you do not use the highest possible sampling rate,
>it definitely would not work. Actually, the EVM
>itself is sampling at 48k samples/second, which is
>higher than most soundcards go.
>
>Doug

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: test results for -> P3D Launch Telemetry Decoder

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 05 Oct 2000 22:07:40 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-113146-2000.10.05-21.16.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The message below was intended for somebody else,
and due to mis-clicking, it went to the DSP list by mistake.

Doug

At 08:34 PM 10/5/00 -0400, Douglas Braun & Nadia Papakonstantinou wrote:
>Sorry for being testy, it was one of those days where
>nothing was going the way it was supposed to...
>
>
>Doug
>
>At 07:50 PM 10/5/00 -0400, you wrote:
> >If you do not use the highest possible sampling rate,
> >it definitely would not work. Actually, the EVM
> >itself is sampling at 48k samples/second, which is
> >higher than most soundcards go.
> >
> >Doug
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
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20. [dsp] Re: P3D Launch Telemetry Decoder for EVM Released!

From: Jim Sanford <wb4gcs@amsat.org>
Date: Fri, 06 Oct 2000 13:33:36 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-113362-2000.10.06-12.42.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Any way to port this to the LL Grace DSP-12?
73,
Jim
wb4gcs@amsat.org

Douglas Braun & Nadia Papakonstantinou wrote:

> Hello,
>
> Surf over to www.dougbraun.com and you can fetch my (working)
> P3D launch telemetry decoder for the EVM. This is a

> special 9600 baud modem for only for P3D LAUNCH telemetry.
>
> This took much longer than I thought to debug. The real problem
> was actually a bug in the original G3RUH.ASM program. Whenever
> the received signal phase was adjusted to improve the syncronization,
> the transmit signal phase would get an equal and opposite adjustment.
> This would not affect half-duplex operation, but when the modem was
> trying to decode its own signal, it would drive itself crazy!
> Eventually I will make the same fix to G3RUH.ASM. This
> will probably improve its operation for satellite use, which
> is full-duplex.
>
> If you try to use this, please give me some feedback, preferably
> BEFORE the P3D launch!
>
> Doug
> NA1DB
>
> ---
> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] Request for advice

From: Alberto di Bene <dibene@usa.net>
Date: Tue, 10 Oct 2000 17:43:45 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114132-2000.10.10-10.53.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello everybody,

          I am seeking advice from the collective mind composed of all the
communications theory experts lurking in this forum.

What I am playing with in my mind is to try to implement an YACP
(Yet Another Communication Program :-) with low data rate,
suitable for very low S/N ratios.

The advice I am seeking is a detail on how to implement correctly
the sampling-rate/datarate synchronization in my code.

But let me first briefly describe the thing :

Suppose I am transmitting 2-out-of-12 frequencies (an MFSK scheme),
with a symbol rate of, let's say, 1 baud.
At the receiving side, suppose I am sampling at 8000 Hz into a
buffer 8000 samples long, giving 1 buffer per second worth of data.

Then I perform an FFT on those data, and find the bins with peak values.
Ideally, if I were synched in time with the TX, I should find
only two peaks, which would then indicate which of the 66 possible
combinations is being transmitted.

As I have no control on the exact frequency, nor the phase, of the
sampling process, what will happen is that, beside those two peaks,
I will have another two, as the sampling time window will have
overlapped the next transmitted symbol.

So, what I think to do is to have a sliding window two samples large,
and, comparing the peaks, decide which couple belongs where.

Admittedly, it is a crude and simple-minded approach, and that's the
reason of my asking. I am sure more refined algorithms do exist around.
Any one willing to shed some light ?

Thanks for any answer,

Alberto   I2PHD

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22. [dsp] Getting psk.cld to boot up by itself?

From: "George Heron N2APB" <n2apb@erols.com>
Date: Tue, 10 Oct 2000 21:25:50 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114227-2000.10.10-20.38.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I'm wondering if anyone has successfully loaded G3PLX's EVM56K program
"psk31.cld" into the flash EEPROM in order to create a boot version?

I realize the value and benefit of using plxboot.cld along with the /b
option on the PC side, and I use it regularly in the development
environment. But for a special project I am working on, it is essential for
me to get psk31.cld operational on boot-up of the EVM.

Neither FLASH.ASM not BOOT.ASM produce a working boot-loaded result. (These
programs are individually the two ways I'm aware of to get a program to be
booted upon power-on.) In both cases the user interface screen comes up but
the system is "dead", with no activity in the radar scope.)

Peter mentioned that perhaps a program needs to start at 0000 in order to be
boot-transformable, but I tried various things and couldn't get it to work
right.

Any help would be greatly appreciated.

73, George N2APB
n2apb@amsat.org

PS: The version I'm working with is psk31evm301.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] Re: Getting psk.cld to boot up by itself?

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Tue, 10 Oct 2000 22:29:27 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114242-2000.10.10-21.39.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have not tried doing this, but I do know that some of the
original flash-writing code for the EVM had bugs. You
might want to try flshboot.asm, which you can find
in the file evmco131.zip at www.dougbraun.com.

THis program is really written for flashing BIOS2-based programs,
but it may work as-is for psk31.cld. You may have to adjust
the addresses and sizes of the memory regions it saves and restores.
You may also need to change the memory location of flshboot itself
to keep it from stomping on any of the PSK31 code.

I have not looked at the source code for psk31 (or flshboot) recently
(if ever),so I can't know for sure how easy it is to flash.
But if the start address is not 0, that can easily be fixed by
adding a jmp instruction at 0. But I believe that plxboot
is clever and can load a program to just about any address,
so I can't imagine why psk31.cld would need to start at a different address...

Doug Braun
NA1DB

At 09:25 PM 10/10/00 -0400, you wrote:
>I'm wondering if anyone has successfully loaded G3PLX's EVM56K program
>"psk31.cld" into the flash EEPROM in order to create a boot version?
>
>I realize the value and benefit of using plxboot.cld along with the /b
>option on the PC side, and I use it regularly in the development
>environment. But for a special project I am working on, it is essential for
>me to get psk31.cld operational on boot-up of the EVM.
>
>Neither FLASH.ASM not BOOT.ASM produce a working boot-loaded result. (These
>programs are individually the two ways I'm aware of to get a program to be

>booted upon power-on.) In both cases the user interface screen comes up but
>the system is "dead", with no activity in the radar scope.)
>
>Peter mentioned that perhaps a program needs to start at 0000 in order to be
>boot-transformable, but I tried various things and couldn't get it to work
>right.
>
>Any help would be greatly appreciated.
>
>73, George N2APB
>   n2apb@amsat.org
>
>PS: The version I'm working with is psk31evm301.

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24. [dsp] Re: Getting psk.cld to boot up by itself?

From: "George Heron N2APB" <n2apb@erols.com>
Date: Tue, 10 Oct 2000 22:31:53 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114245-2000.10.10-21.43.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Well, I see a note in the FLASH.ASM header header block that makes a little
sense. KC7WW points out that only PCODE will be saved into EEPROM and that
one must programmatically set constants into X or Y space.

There indeed is a whole bunch of constants, coefficients, jump table lists,
etc. in the beginning of the program. And there's more (but smaller number
of) constants at the end of the program. So I'm guessing that these
constants (et al) can/should be set by having a new "INIT" routine called
right away at the start in order to specifically put these values into the
proper X & Y locations before the main program gets executed.

Again, if anyone has thought this through, or better yet done it, I'd be
very grateful for some assist.

Thanks.

--George N2APB
  n2apb@amsat.org

----- Original Message -----
From: "George Heron N2APB" <n2apb@erols.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, October 10, 2000 9:25 PM
Subject: [dsp] Getting psk.cld to boot up by itself?

I'm wondering if anyone has successfully loaded G3PLX's EVM56K program
"psk31.cld" into the flash EEPROM in order to create a boot version?

I realize the value and benefit of using plxboot.cld along with the /b
option on the PC side, and I use it regularly in the development
environment. But for a special project I am working on, it is essential for
me to get psk31.cld operational on boot-up of the EVM.

Neither FLASH.ASM not BOOT.ASM produce a working boot-loaded result. (These
programs are individually the two ways I'm aware of to get a program to be
booted upon power-on.) In both cases the user interface screen comes up but
the system is "dead", with no activity in the radar scope.)

Peter mentioned that perhaps a program needs to start at 0000 in order to be
boot-transformable, but I tried various things and couldn't get it to work
right.

Any help would be greatly appreciated.

73, George N2APB
  n2apb@amsat.org

PS: The version I'm working with is psk31evm301.

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: "Lyle Johnson" <wa7gxd@email.msn.com>
Date: Tue, 10 Oct 2000 21:26:53 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114271-2000.10.10-23.40.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi!

I have been workking with Doug to test the modem but either my EVM is broken
or I am :-)

In any event, I can't get the EVM to load and run anything except the
Motorola demo programs.

So, rather then spend my life messing with my EVM, or borrowing Doug's, or
??? I have done the following:

1) Set up the IHU2 engineering unit to output a message block in ASCII.
This is an ASCII text block that simply repeats about once every five
seconds. This is in exactly the same data format that will be used by the
spacecraft after launch. If you can decode this, you can decode the
transmissions from P3D.

2) Set up a hardware demod - the one James Miller used to evaluate the
system in the first place - and captured several frames of data from the
IHU2 downlink. I used an Icom R10 receiver with a discriminator tap.

3) I captured 60 seconds of "audio" using my PC soundcard, as a .WAV file,
at 44.1 kHz sampling, 16 bits, mono. The downlink message repeats about
every 5 seconds, so this is about 12 frames of data.

4) I played the .WAV file back into the demod and got less than perfect
results - but I have zero experience with the PC, soundcard, or any other
aspect of this. I did note that I was able to get a few almost perfect
blocks with this setup.

If you get even a few correct characters of ASCII in a row from your demod
with this file, then the demod should be OK. This will test the bit
decoding and so forth.

***

The ZIP file containing the .WAV file and several captured blocks so you can
compare what your decoder believes it is copying versus what the the
spacecraft believes it is sendingis a little over 2 megabytes in length,
nearly all of it the .WAV file.

I will EMAIL this to anyone who requests it to test the demod on their EVM.

I realize this is less than perfect, and it would be better if I could get
my EVM to work, but I have run out of time and must get on with other
things. If anyone has any ideas why the EVM will load and run Motorola
programs but seems to not work with other stuff, please let me know.

73,

Lyle

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] Re: [hfsig] Request for advice

From: Alberto di Bene <dibene@usa.net>
Date: Wed, 11 Oct 2000 11:28:44 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114330-2000.10.11-04.39.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

To clarify a bit my previous posting, the numbers (1 baud, 8000 Hz, etc.)
where there just as an example, they are not the actual numbers I plan to use.

What I am really interested in, is to have an advice on how to cope with
the inter-symbol overlapping. I could of course sample at a much higher rate
than the symbol rate, but of course this would be a tremendous waste of
processing power and/or bandwidth. I am sure there must exist around algorithms
for this purpose. I have been suggested with a private note to use a message
preamble to put things in synch, but, unless something is escaping me, this
cannot be done in my case, as the sampling is done on a sound card, where I
have no control on the clock frequency, nor its phase, so everything must be
done in software.

Thanks for any advice.

73
Alberto   I2PHD

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

27. [dsp] 9k6

From: w4sm@cstone.net (Stacey Mills)
Date: Wed, 11 Oct 2000 07:43:48 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114349-2000.10.11-06.58.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Lyle!
     James arrived safely and is "sleeping it off" at the moment. He
believes the problem with the 9k6 and the flight IHU-2 could be that he has
the deviation set too high (I think he said it's about +/- 4.5 Khz) so some
receivers might not be able to handle the signal width..... This can be
easily adjusted if needed.

...anyway, we'll keep you posted.   I have to go to my real job for a while
this morning.

--
 ____
Stacey E. Mills, W4SM   WWW: http://www.cstone.net/~w4sm/ham1.html
 Charlottesville, VA   PGP key: http://www.cstone.net/~w4sm/key
 ____

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

28. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Wed, 11 Oct 2000 08:34:38 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114355-2000.10.11-07.43.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Of course, you should send me the WAV file. If you want,
I can probably host it on my web site.

Are you still interested in getting a pre-programmed EEPROM chip?
I have a couple of spares, and I could get it out in today's
mail.

Doug

At 09:26 PM 10/10/00 -0700, you wrote:
>Hi!
>
>I have been workking with Doug to test the modem but either my EVM is broken
>or I am :-)
>
>In any event, I can't get the EVM to load and run anything except the

>Motorola demo programs.
>
>So, rather then spend my life messing with my EVM, or borrowing Doug's, or
>??? I have done the following:
>
>1) Set up the IHU2 engineering unit to output a message block in ASCII.
>This is an ASCII text block that simply repeats about once every five
>seconds. This is in exactly the same data format that will be used by the
>spacecraft after launch. If you can decode this, you can decode the
>transmissions from P3D.
>
>2) Set up a hardware demod - the one James Miller used to evaluate the
>system in the first place - and captured several frames of data from the
>IHU2 downlink. I used an Icom R10 receiver with a discriminator tap.
>
>3) I captured 60 seconds of "audio" using my PC soundcard, as a .WAV file,
>at 44.1 kHz sampling, 16 bits, mono. The downlink message repeats about
>every 5 seconds, so this is about 12 frames of data.
>
>4) I played the .WAV file back into the demod and got less than perfect
>results - but I have zero experience with the PC, soundcard, or any other
>aspect of this. I did note that I was able to get a few almost perfect
>blocks with this setup.
>
>If you get even a few correct characters of ASCII in a row from your demod
>with this file, then the demod should be OK. This will test the bit
>decoding and so forth.
>
>***
>
>The ZIP file containing the .WAV file and several captured blocks so you can
>compare what your decoder believes it is copying versus what the the
>spacecraft believes it is sendingis a little over 2 megabytes in length,
>nearly all of it the .WAV file.
>
>I will EMAIL this to anyone who requests it to test the demod on their EVM.
>
>I realize this is less than perfect, and it would be better if I could get
>my EVM to work, but I have run out of time and must get on with other
>things. If anyone has any ideas why the EVM will load and run Motorola
>programs but seems to not work with other stuff, please let me know.
>
>73,
>
>Lyle
>
>
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

29. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Wed, 11 Oct 2000 08:41:01 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114359-2000.10.11-07.52.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I would like the WAV file, etc. please.

Many thanks to Lyle and Doug for their efforts!

73,

> >I will EMAIL this to anyone who requests it to test the demod on their EVM.
> >
> >I realize this is less than perfect, and it would be better if I could get
> >my EVM to work, but I have run out of time and must get on with other
> >things. If anyone has any ideas why the EVM will load and run Motorola
> >programs but seems to not work with other stuff, please let me know.

> >
> >73,
> >
> >Lyle

Mark L. Hammond [N8MH]

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

30. [dsp] P3D 9k6 telemetry and the EVM/TAPR RI

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Wed, 11 Oct 2000 15:07:49 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@lists.tapr.org
Message-ID: <LYR3532-114438-2000.10.11-14.17.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Doug, Lyle, and Stacey--

Look what I copied with my EVM+Doug's p3d9k6 code from your p3d wave file,
Lyle :-)

NúNú□NúúP9À0M HI THIS IS P3D IHU-2 (C)1999 Chuck James Karl Lyle and Peter Th
e IHU-2 is an experimental flight computer designed for AMSAT spacecraft.
CPU is
  an Intel/Digital SA-1100 clocked at 133 MHz. It has 512Kb of EDAC
protected RAM
, 8 Mb of unproteIis interfaced directly.   73 de N0ADI G3RUH
DJ4ZC
  WA7GXD and DB2OS   ÃúNN³úúNúNP9À0M HI THIS IS P3D IHU-2
(C)1999 Chuc
k James Karl Lyle and Peter The IHU-2 is an experimental flight computer
designe
d for AMSAT spacecraft. CPU is an Intel/Digital SA-1100 clocked at 133 MHz.
It h
as 512Kb of EDAC protected RAM, 8 Mb of unprotected RAM and 512Kb flash
ROM. The
re is an I/Q modulator and demodulator with 32 kHz RF bandwidth. There's a
CAN b
us connection and the IHU-1 beacon can be monitored. A CMOS camera is
interface
d directly.   73 de N0ADI G3RUH DJ4ZC WA7GXD and
DB2OS   ÃúN
úNúNúNP9À0M HI THIS IS P3D IHU-2 (C)1999 Chuck James Karl Lyle and Peter
The IH
U-2 is an experimental flight computer designed for AMSAT spacecraft. CPU is an
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demodul
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rfaced directly.   73 de N0ADI G3RUH DJ4ZC WA7GXD and DB2OS
        ÃKWNúúNã-P9À0M HI THIS IS P3D IHU-2 (C)1999 Chuck James Karl Lyle and
Peter
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is an Intel/Digital SA-1100 clocked at 133 MHz. It has 512Kb of EDAC
protected R
AM, 8 Mb of unprotected RAM and 512Kb flash ROM. There is an I/Q modulator
and d
emodulator with 32 kHz RF b. There's a CAN bus connection and the IHU-1
beacon c
an be monitored. A9QI
úNúNúN

Looks promising, guys...thanks for all the hard work! I'll see if I can
maybe work with the audio levels to get a better copy. Took me under 2
mins from unzipping the wave, to getting this copy...

73,

Mark L. Hammond [N8MH]

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

31. [dsp] RE: P3D 9k6 telemetry and the EVM/TAPR RI

From: "Lyle Johnson" <wa7gxd@fidalgo.net>
Date: Wed, 11 Oct 2000 12:31:07 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114444-2000.10.11-14.41.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Mark!

That looks great. I suspect the .WAV file is imperfect - I have no idea
what the audio response of the record function of the soundcard really is -
it may be missing low frequencies, or roll-ff at high frequencies or...

Thanks for checking this.

73,

Lyle

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

32. [dsp] Re: 9k6

From: Jim Sanford <wb4gcs@amsat.org>
Date: Wed, 11 Oct 2000 19:21:26 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114467-2000.10.11-18.30.02--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Stacey:
I guess this means you are home. Welcome back. My best to James.

I'm going to be in Portland; recognize that many of you won't. However, those
of you that are, I'd really like to meet.

Go, team Go!

73,
Jim
wb4gcs@amsat.org

Stacey Mills wrote:

> Hello Lyle!
>   James arrived safely and is "sleeping it off" at the moment. He
> believes the problem with the 9k6 and the flight IHU-2 could be that he has
> the deviation set too high (I think he said it's about +/- 4.5 Khz) so some
> receivers might not be able to handle the signal width..... This can be
> easily adjusted if needed.
>
> ...anyway, we'll keep you posted.   I have to go to my real job for a while
> this morning.
>
> --
>   ____
>   Stacey E. Mills, W4SM   WWW: http://www.cstone.net/~w4sm/ham1.html
>   Charlottesville, VA   PGP key: http://www.cstone.net/~w4sm/key
>   ____
>
> ---
> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

33. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: Robert McGwier <rwmcgwier@home.com>
Date: Wed, 11 Oct 2000 20:49:07 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114480-2000.10.11-19.59.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Please send it to me.

Bob

At 12:26 AM 10/11/2000 Wednesday, Lyle Johnson wrote:

>The ZIP file containing the .WAV file and several captured blocks so you can
>compare what your decoder believes it is copying versus what the the
>spacecraft believes it is sendingis a little over 2 megabytes in length,
>nearly all of it the .WAV file.
>
>I will EMAIL this to anyone who requests it to test the demod on their EVM.
>
>I realize this is less than perfect, and it would be better if I could get
>my EVM to work, but I have run out of time and must get on with other
>things. If anyone has any ideas why the EVM will load and run Motorola
>programs but seems to not work with other stuff, please let me know.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

34. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Wed, 11 Oct 2000 21:11:37 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114489-2000.10.11-20.21.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

You can grab this from www.dougbraun.com now.

Doug Braun
NA1DB

At 08:49 PM 10/11/00 -0400, you wrote:
>Please send it to me.
>
>Bob
>
>
>
>At 12:26 AM 10/11/2000 Wednesday, Lyle Johnson wrote:
>
>>The ZIP file containing the .WAV file and several captured blocks so you can
>>compare what your decoder believes it is copying versus what the the
>>spacecraft believes it is sendingis a little over 2 megabytes in length,
>>nearly all of it the .WAV file.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

35. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: Robert McGwier <rwmcgwier@home.com>
Date: Thu, 12 Oct 2000 07:46:01 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114566-2000.10.12-06.55.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks!

At 09:11 PM 10/11/2000 Wednesday, you wrote:
>You can grab this from www.dougbraun.com now.
>
>Doug Braun
>NA1DB
>

>At 08:49 PM 10/11/00 -0400, you wrote:
> >Please send it to me.
> >
> >Bob
> >
> >
> >
> >At 12:26 AM 10/11/2000 Wednesday, Lyle Johnson wrote:
> >
> >>The ZIP file containing the .WAV file and several captured blocks so
> you can
> >>compare what your decoder believes it is copying versus what the the
> >>spacecraft believes it is sendingis a little over 2 megabytes in length,
> >>nearly all of it the .WAV file.
>
>
>---
>You are currently subscribed to dsp as: RWMCGWIER@HOME.COM
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

36. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: "Lyle Johnson" <wa7gxd@email.msn.com>
Date: Sat, 14 Oct 2000 10:52:58 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: <rays@waldonet.net.mt>
Message-ID: <LYR3532-115011-2000.10.14-13.03.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

All,

I have had several requests now for the .WAV file and its decoded contents.

Please note that all of this is now available at www.dougbraun.com courtesy
of Doug Braun. CLick on the link "some test data" in the first bulleted box
in the Ham Radio Software section of the page.

If you prefer me to EMAIL them to you, I can do so, but it is probably
easier if you can download them from Doug's site.

73,

Lyle

> > The ZIP file containing the .WAV file and several captured
> > blocks so you can compare what your decoder believes it is
> > copying versus what the the spacecraft believes it is sending
> > is a little over 2 megabytes in length,
> > nearly all of it the .WAV file.
> >
> > I will EMAIL this to anyone who requests it to test the demod
> > on their EVM.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

37. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sat, 14 Oct 2000 15:38:43 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-115018-2000.10.14-14.47.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 01:52 PM 10/14/2000, you wrote:
>All,
>
>I have had several requests now for the .WAV file and its decoded contents.
>
>Please note that all of this is now available at www.dougbraun.com courtesy
>of Doug Braun. CLick on the link "some test data" in the first bulleted box

>in the Ham Radio Software section of the page.

Here...let's make it REALLY easy to get :-)

http://members.bellatlantic.net/~dougnad/software/p3dtest.zip

73,

Mark

>If you prefer me to EMAIL them to you, I can do so, but it is probably
>easier if you can download them from Doug's site.
>
>73,
>
>Lyle
>
> > > The ZIP file containing the .WAV file and several captured
> > > blocks so you can compare what your decoder believes it is
> > > copying versus what the the spacecraft believes it is sending
> > > is a little over 2 megabytes in length,
> > > nearly all of it the .WAV file.
> > >
> > > I will EMAIL this to anyone who requests it to test the demod
> > > on their EVM.
>
>
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

38. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: "Lyle Johnson" <wa7gxd@email.msn.com>
Date: Sat, 21 Oct 2000 11:20:29 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: "G3ruh" <g3ruh@jrmiller.demon.co.uk>
Message-ID: <LYR3532-115955-2000.10.21-13.32.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello!

I finally found and fixed the probllem with my EVM and installed an EEPROM
with Doug's modem code in it. Then set up the IHU2 engineering unit, loaded
it with test code, etc.

Doug's demodulator is working perfectly in my EVM, decoding the 9K6 downlink
from the IHU2. The test setup runs the IQModulator from the IHU2 at 11.05
MHz through a 30 dB fixed then a 0-120 dB step attenuator to an Icom R-10
receiver with a discriminator tap. That output is fed to the Radio 1 DIN
connector on the EVM.

With an input to the R-10 of about -110 dBm (~ 0.7 uV), the decoding is
maybe 30% accurate. With an input signal of -100 dBm (~2 uV), the decoding
is flawless.

Ready for launch!

73,

Lyle

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

39. [dsp] RE: test results for -> P3D Launch Telemetry Decoder

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sun, 22 Oct 2000 14:56:58 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-116042-2000.10.22-14.06.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Great news!

Doug

At 11:20 AM 10/21/00 -0700, you wrote:
>Hello!
>
>I finally found and fixed the probllem with my EVM and installed an EEPROM
>with Doug's modem code in it. Then set up the IHU2 engineering unit, loaded
>it with test code, etc.
>
>Doug's demodulator is working perfectly in my EVM, decoding the 9K6 downlink
>from the IHU2. The test setup runs the IQModulator from the IHU2 at 11.05
>MHz through a 30 dB fixed then a 0-120 dB step attenuator to an Icom R-10
>receiver with a discriminator tap. That output is fed to the Radio 1 DIN
>connector on the EVM.
>
>With an input to the R-10 of about -110 dBm (~ 0.7 uV), the decoding is
>maybe 30% accurate. With an input signal of -100 dBm (~2 uV), the decoding
>is flawless.
>
>Ready for launch!
>
>73,
>
>Lyle
>
>
>
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

40. [dsp] Satellite signal specifications.

From: Jake Janovetz <janovetz@uiuc.edu>
Date: Sun, 29 Oct 2000 10:50:45 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-116992-2000.10.29-11.00.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

    I am developing lab work for a class that would walk students
through the demodulation of a real "out-there" signal. Several
such signals are candidates, including one which we design and
broadcast for simple text-base communication.
    I wanted to get some suggestions from you folks who might know
of some more interesting signals that are fully specified and
moderately easy to receive. We have (or can buy) any of the
RF front-end equipment we need but may need antennas for certain
signals. I'm looking for signals with bitrates between 400 bps
DSP-based demodulators) on up to 2-4 Mbps (FPGA demodulators).
    Some of the signals I've considered are the GOES HRPT 5-color
digital signals, GPS (relatively complicated), the 434 bps
signal from the ACE spacecraft (not quite as interesting as GOES
plots).

    If you have any suggestions and/or websites please let me know!

    Jake

You are currently subscribed to dsp as: lyris.dsp@tapr.org

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

41. [dsp] Re: Satellite signal specifications.

From: Thomas Sailer <sailer@ife.ee.ethz.ch>
Date: Mon, 30 Oct 2000 09:51:57 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-117067-2000.10.30-03.02.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Jake Janovetz wrote:

>   I am developing lab work for a class that would walk students
> through the demodulation of a real "out-there" signal. Several
> such signals are candidates, including one which we design and
> broadcast for simple text-base communication.

We have used the teletext signal (ETSI ETS 300 706) for this purpose,
because people are familiar with the teletext system from their
TV, the signal is easily available (at least in europe), the signal
is simple, and one can obtain it easily with Connexant BTTV
chip based PC TV cards. The BTTV cards just sample the vertical
blanking interval with a sampling rate between 30 and 40MSamples/s,
the whole demodulation is done on the PC. The instantaneous
bitrate is several MBit/s, but because the signal is only
present in the VBI the average bitrate is at most 200kBit/s.

The students are supposed to implement the demodulator.

Tom

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

November 2000

Original source file: dsp.0011
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0011

1. [dsp] Software Defined Satellite DSP Radio Project

From: Darrell Bellerive <ve7cla@telus.net>
Date: Sat, 04 Nov 2000 15:21:53 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-118117-2000.11.04-17.34.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

A idea for a software defined DSP satellite radio was proposed by a
group of hams on the AMSAT mailing list this week.

A new email reflector was started yesterday and a web page is in
development. You can check out the DSP-RADIO email archive at
http://www.qth.net/

Please have a look and see if some synergy can be established between
this project and the work that TAPR has done and may have planned.

Darrell Bellerive
VE7CLA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Phase 3D Telemetry Program

From: "Stacey E. Mills, M.D." <w4sm@cstone.net> (by way of "Mark L. Hammond" <hammond@surrealnet.net>)
Date: Sat, 11 Nov 2000 23:29:42 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119168-2000.11.11-22.40.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello All,

Stacey W4MS posted this to the AMSAT-BB mailing list. Since the software
includes the DSP-93 400 baud telemetry code, I thought it was would be of
interest to this list (my apologies to those of you on both lists...)

73,

Mark N8MH

P.S.---THANKS Stacey et al.!

A zip file (555K) containing my P3D telemetry decoding program (P3T.exe),
as well as some additional supporting files is now available at:

          www.cstone.net/~w4sm2/software2/P3t_AP.zip

The program will run on Win95/98/NT/2000 platforms. Additional programs
are under development for MacIntosh and Linux platforms. A 400 bps PSK
demodulator, as used with AO-13, is required. Hardware and DSP
demodulators are available. Additional information regarding demodulators,
and the telemetry format can be found at:

        http://www.amsat-dl.org/p3d/

Please read the "readme.txt" file before attempting to install this
software.   A help file is also provided.
My ability to answer specific questions regarding this software is
virtually zero for the foreseeable future, given the extreme efforts
required for P3D. However, if you post questions to the Amsat-BB, other
users may be able to help and if (when) true bugs are found and brought to
my attention, I will make every effort to correct them ASAP. "It would be
nice ifs....." will be addressed as time allows, but probably not for a while.

NOTE that I am releasing this software as freeware, but if you like it, in
the spirit of support for amateur satellite efforts, I ask that you make a
minimum $20.00 contribution to AMSAT in the name of P3T. Additional
information regarding a support donation is present in the "readme.txt" file.

These promise to be exciting times!!

Enjoy!!

--

```
  _____________________________________________________________________
 Stacey E. Mills, W4SM    WWW:    http://www.cstone.net/~w4sm/ham1.html
  Charlottesville, VA     PGP key: http://www.cstone.net/~w4sm/key
  _____________________________________________________________________
```

Via the amsat-bb mailing list at AMSAT.ORG courtesy of AMSAT-NA.
To unsubscribe, send "unsubscribe amsat-bb" to Majordomo@amsat.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] DSP-93/P3Telemetry questions

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sun, 12 Nov 2000 14:53:13 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119288-2000.11.12-14.46.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

To introduce the topic, I've been a DSP-93 user since the beta testing phase--but alas, I may be a bit rusty, and my DSP-93 a bit dusty ;-)

In any event, my DSP-93 is from the beta testing phase. I *think* it is current with the production units (but I may be mistaken). It is currently running REV 2.18 EPROMS.

Couple of questions/observations at my station:

1) Under my current OS of Windows2000 Professional, I cannot use the command line version of dspload.exe to load any .obj into the DSP-93. It acts like it has started, but then quits after a couple of seconds. The code was NOT loaded to the DSP-93, that much is certain. (yes, the dspload.cfg is correct)

2) Under Win2k Professional, I *CAN* use the D93WE.exe program distributed with the DSP-93 code many years ago. Runs fine, loads the DSP-93 just fine. It does take quite a while to upload the code--20-30 seconds in fact.

3) Under Win2k Professional, I cannot use the DSP loader built into the newly released P3T.exe program. It acts like case #1 above--starts, then acts like it has finished in about 4 secs or so. However, the code has NOT been loaded...

Anybody else using Win2k that has been using their DSP-93 lately?

Thanks,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] successes with P3T.exe and AMSAT/TAPR DSP-93 and TAPR DSP56002EVM tests

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sun, 12 Nov 2000 15:53:27 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119290-2000.11.12-15.04.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello all,

I'd like to share some reports of success with Stacey's recently release P3T telemetry program.

I have been able to play a P3D audio wave file into both my AMSAT/TAPR DSP-93 and TAPR DSP56002EVM units and decode the data :-)

Below are two rather big (256k) .jpg files from desktop snap shots showing the data decoded with both units. (They are 1280x1024, so you 640x480 desktop users will be moving around a lot.)

http://camel.campbell.edu/~hammond/ham/p3d/p3t_dsp93.jpg

http://camel.campbell.edu/~hammond/ham/p3d/p3t_evm.jpg

Basic setup is to play the P3D audio wave file with my sound card/Windows Media Player into either DSP unit with P3T running.

The only caveat I have found is that the DSP-93 runs at 1200 baud serial out, while the DSP56002EVM runs at 57600 out (as I have it configured). The program P3T seems to work at both serial speeds, but I had to EXIT the P3T program after changing the serial speeds, so pay attention to that detail if you are messing with serial port speeds as I have been doing.

As far as I can tell, the units are decoding the data the same. They are either both right, or both wrong ;-) I prefer the former!!

Currently, I have the following ready for the launch:

DSP-93 running 400 bpsk decoder
DSP56002EVM running 400 bpsk decoder
DSP56002EVM running 9k6 raw telemetry decoder

Now, if I only had orbital elements and a real signal on a known frequency, I'd be set!

Great job by the DSP programmers that wrote the 400 psk code, and Stacey for releasing P3T soon enough for some testing before launch! Many, many thanks.

These are exciting times indeed.

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: successes with P3T.exe and AMSAT/TAPR DSP-93 and TAPR DSP56002EVM tests

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sun, 12 Nov 2000 18:36:04 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119312-2000.11.12-17.46.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Where is the .asm file for the EVM 400baud telemetry decoder?

Thanks,

Doug
NA1DB

At 03:53 PM 11/12/00 , you wrote:
>Hello all,
>
>I'd like to share some reports of success with Stacey's recently release P3T telemetry program.
>
>I have been able to play a P3D audio wave file into both my AMSAT/TAPR DSP-93 and TAPR DSP56002EVM units and decode the data :-)
>
>Below are two rather big (256k) .jpg files from desktop snap shots showing the data decoded with both units. (They are 1280x1024, so you 640x480 desktop users will be moving around a lot.)
>
>http://camel.campbell.edu/~hammond/ham/p3d/p3t_dsp93.jpg
>
>http://camel.campbell.edu/~hammond/ham/p3d/p3t_evm.jpg
>
>Basic setup is to play the P3D audio wave file with my sound card/Windows Media Player into either DSP unit with P3T running.
>
>The only caveat I have found is that the DSP-93 runs at 1200 baud serial out, while the DSP56002EVM runs at 57600 out (as I have it configured). The program P3T seems to work at both serial speeds, but I had to EXIT the P3T program after changing the serial speeds, so pay attention to that detail if you are messing with serial port speeds as I have been doing.
>
>As far as I can tell, the units are decoding the data the same. They are either both right, or both wrong ;-) I prefer the former!!

>
>Currently, I have the following ready for the launch:
>
>DSP-93 running 400 bpsk decoder
>DSP56002EVM running 400 bpsk decoder
>DSP56002EVM running 9k6 raw telemetry decoder
>
>Now, if I only had orbital elements and a real signal on a known frequency, I'd be set!
>
>Great job by the DSP programmers that wrote the 400 psk code, and Stacey for releasing P3T soon enough
for some testing before launch!   Many, many thanks.
>
>These are exciting times indeed.
>
>73,
>
>Mark L. Hammond [N8MH]
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: successes with P3T.exe and AMSAT/TAPR DSP-93 and TAPR DSP56002EVM tests

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sun, 12 Nov 2000 19:14:09 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119313-2000.11.12-18.24.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Doug,

I put a copy of the 400 bpsk .asm file I've been using for the 56002 EVM
here...It is for the 514 block version (with maybe some other custom things
for my setup here):
http://camel.campbell.edu/~hammond/ham/p3d/400_514.asm

Ray Suban sent it to me via email..these appear to be the same thing??
ftp://ftp.tapr.org/dsp/Motorola/dsp56002/evm56k/bpsk400.txt
ftp://ftp.tapr.org/dsp/Motorola/dsp56002/evm56k/bpsk400.zip

For those wanting the P3D wave files, they are here:
ftp://ftp.tapr.org/dsp/Motorola/dsp56002/evm56k/400bpsk_wav.txt
ftp://ftp.tapr.org/dsp/Motorola/dsp56002/evm56k/400bpsk_wav.zip

And for those wanting the DSP-93 400 bpsk .obj files, they are included
with the P3T distribution file here:
http://www.cstone.net/~w4sm2/software2/P3t_AP.zip

73,

Mark N8MH

At 06:36 PM 11/12/2000, you wrote:
>Where is the .asm file for the EVM 400baud telemetry decoder?
>
>Thanks,
>
>Doug
>NA1DB

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] telemetry picture

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 16 Nov 2000 10:01:18 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119958-2000.11.16-09.14.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Isn't this a pretty sight? :-)

http://camel.campbell.edu/~hammond/ham/p3d/p3d_telem1.jpg

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Printing telemtry in North Carolina, USA :-)

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 16 Nov 2000 10:01:07 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119957-2000.11.16-09.13.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Whoop! Came home from work, just heard beacon turn ON at about 14:46 UTC.

AT 145.896.8 MHz

Using DSP-93, 400 bpsk modem code--telemetry is printing!

S meter reading S2-S3, LOUD and clear with 10 element cross yagi, circular
polarized (RHCP).

Happy days, indeed!

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: Printing telemtry in North Carolina, USA :-)

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 16 Nov 2000 10:25:55 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119964-2000.11.16-09.36.37--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Also working with DSP56002EVM unit :-)

Hurray.

73,

Mark

At 10:01 AM 11/16/2000, you wrote:
>Whoop! Came home from work, just heard beacon turn ON at about 14:46 UTC.
>
>AT 145.896.8 MHz
>
>Using DSP-93, 400 bpsk modem code--telemetry is printing!
>
>S meter reading S2-S3, LOUD and clear with 10 element cross yagi, circular
>polarized (RHCP).
>
>
>
>Happy days, indeed!
>
>73,
>

>Mark L. Hammond [N8MH]
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: telemetry picture

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 16 Nov 2000 10:57:09 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119969-2000.11.16-10.08.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am getting almost error-free telemetry data from my 56002
when I display it with a terminal emulator program,
but the P3T program refuses to do anything for me!
Naturally, I have set the correct port and baud rate.
Do you have any tips?

Also the EVM demodulator program seems to work well, except that
it never generates any tuning pulses. Is this feature
known to work? Fortunately the Doppler shift is not very severe
on 2M...

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: telemetry picture

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 16 Nov 2000 11:09:56 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119971-2000.11.16-10.21.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Working for me...and I think Alan NE1H has his working now too.

P3T displays just fine...tune the EVM until the DCD, and then CAT LED is
lit (depends where you have the LEDs, I suppose...at least with my code it
works that way). I found I had to run the volume UP pretty loud for my
station...

Did you check the RAW to turn it ON? I clicked them ALL on, so to watch
all the telemetry.

Not sure about the mic-click tuning either, Doug. I had to do a quick
couple test while playing hookey from work ;-) so I didn't get to test much.

At 10:57 AM 11/16/00 -0500, you wrote:
>I am getting almost error-free telemetry data from my 56002
>when I display it with a terminal emulator program,
>but the P3T program refuses to do anything for me!
>Naturally, I have set the correct port and baud rate.
>Do you have any tips?
>
>Also the EVM demodulator program seems to work well, except that
>it never generates any tuning pulses. Is this feature
>known to work? Fortunately the Doppler shift is not very severe
>on 2M...
>
>Doug
>NA1DB
>

>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: telemetry picture

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 16 Nov 2000 11:28:35 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119975-2000.11.16-10.39.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

It's working for me now. The problem seems to be this:
I would set the COM1 baud rate to 57600, and save the setup parameters.
But the next time I started the program, it would go back to 1200 baud!
It seems to silently refuse to save a 57600 baud setting.

My workaround was to go into Regedit and change the baud rate value
stored there. Then when I restarted P2T, it came up working
at the correct speed.

Now all I need is an explanation of what all
the numbers mean...

Doug
NA1DB

At 11:09 AM 11/16/00 , you wrote:
>Working for me...and I think Alan NE1H has his working now too.
>
>P3T displays just fine...tune the EVM until the DCD, and then CAT LED is lit (depends where you have
the LEDs, I suppose...at least with my code it works that way). I found I had to run the volume UP
pretty loud for my station...
>
>Did you check the RAW to turn it ON? I clicked them ALL on, so to watch all the telemetry.
>
>Not sure about the mic-click tuning either, Doug. I had to do a quick couple test while playing hookey
 from work ;-) so I didn't get to test much.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Re: telemetry picture

From: "Stacey E. Mills, M.D." <w4sm@cstone.net>
Date: Thu, 16 Nov 2000 11:39:04 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119977-2000.11.16-11.00.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 11:28 AM 11/16/2000 -0500, you wrote:
>It's working for me now. The problem seems to be this:
>I would set the COM1 baud rate to 57600, and save the setup parameters.
>But the next time I started the program, it would go back to 1200 baud!
>It seems to silently refuse to save a 57600 baud setting.

Doug, make sure when you save things that the baud setting is highlighed
(ie. blue or your highlighted color) and not just visible, but B&W in the
window. If its highlighted it should save appropriately.

Let me know if this works for you.
Thanks.

--
____
Stacey E. Mills, M.D. WEB: http://www.people.virginia.edu/~sem2r/

Charlottesville, VA   E-Mail: sem2r@virginia.edu or w4sm@cstone.net
                         Office Phone: 804-982-4406 Fax: 804-924-8767
____

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] Re: telemetry picture

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Thu, 16 Nov 2000 16:48:15 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119978-2000.11.16-11.01.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Doug,

Have the same problem with a DSP-2232. Good raw TLM to a terminal program,
but nothing from P3T. Have the baud rate and 512 selected. Will continue
fiddling. Fortunately, I have a long time to work with it today!

Great work AMSAT!

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] Re: telemetry picture

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 16 Nov 2000 12:01:17 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119980-2000.11.16-11.12.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Yes, it works for me.

Thanmks,

Doug

At 11:39 AM 11/16/00 , you wrote:
>At 11:28 AM 11/16/2000 -0500, you wrote:
>>It's working for me now. The problem seems to be this:
>>I would set the COM1 baud rate to 57600, and save the setup parameters.
>>But the next time I started the program, it would go back to 1200 baud!
>>It seems to silently refuse to save a 57600 baud setting.
>
>Doug, make sure when you save things that the baud setting is highlighed (ie. blue or your highlighted
color) and not just visible, but B&W in the window. If its highlighted it should save appropriately.
>
>Let me know if this works for you.
>Thanks.
>
>
>
>--
>____
>Stacey E. Mills, M.D. WEB: http://www.people.virginia.edu/~sem2r/
>Charlottesville, VA   E-Mail: sem2r@virginia.edu or w4sm@cstone.net
>   Office Phone: 804-982-4406 Fax: 804-924-8767
>____
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: telemetry picture

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 16 Nov 2000 12:02:29 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119982-2000.11.16-11.15.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Also don't forget to turn on one of the "Text" buttons.
If "OFF" is selected, it will not run.

Doug

At 11:48 AM 11/16/00 , you wrote:
>Doug,
>
>Have the same problem with a DSP-2232. Good raw TLM to a terminal program,
>but nothing from P3T. Have the baud rate and 512 selected. Will continue
>fiddling. Fortunately, I have a long time to work with it today!
>
>Great work AMSAT!
>
>Alan
>WA4SCA
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] Re: telemetry picture

From: "Alan Biddle" <APBIDDLE@att.net>
Date: Thu, 16 Nov 2000 17:33:44 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119986-2000.11.16-11.44.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Doug,

Have RAW on, and even looked at the registry. Found the correct com1, 19200
values. Still nothing. Will post a note on the general board to see if
someone has gotten it working with the DSP-2232, or another 512 byte
decoder.

Alan
WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] Re: telemetry picture

From: Alberto di Bene <dibene@usa.net>
Date: Thu, 16 Nov 2000 18:49:31 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119987-2000.11.16-12.01.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Just a question : are you guys using the bare 56002 EVM,
or the boxed version with the TAPR EVM Enclosure and
the interfacing circuitry ?   TNX.

Alberto   I2PHD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: telemetry picture

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 16 Nov 2000 12:59:08 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119991-2000.11.16-12.10.21--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

I'm using the TAPR Radio Interface/enclosure here.

I think Doug has a homebrew interface?

73,

Mark

At 06:49 PM 11/16/00 +0100, you wrote:
>Just a question : are you guys using the bare 56002 EVM,
>or the boxed version with the TAPR EVM Enclosure and
>the interfacing circuitry ?   TNX.
>
>Alberto   I2PHD
>
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] what the telemetry means...

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 16 Nov 2000 13:41:52 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119996-2000.11.16-12.52.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>
>Now all I need is an explanation of what all
>the numbers mean...
>
>Doug
>NA1DB

Here is the information, Doug. It's a sensory overload for me :-)

http://www.amsat-dl.org/p3d/

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] 56002 + P3T

From: Mike73@aol.com
Date: Thu, 16 Nov 2000 17:17:29 EST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120037-2000.11.16-16.30.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Howdy,

Anyone got P3T and the EVMDSP56002EVM-RI working? Here's my problem:

Loaded rxpsk400.lod into EVM with DL32. I'm using the 19,200 Leonid.
COP light flashes regularly. I assume this is a normal heartbeat (or so it
says in the .asm file)
I tuned my FT-736R until I get a DCD light followed by a CAT light.
I loaded Hyperterminal with a direct connect to COM2 (where my EVM lives) at
19,200.

I see raw data fine. "THIS IS P3D etc etc."

Now, I run P3T. I've set baud to 19200 and it's highlighted and saved. 512
byte block. I have checked Raw in Text section. I see nothing for data.......

Here's the fun part------I set Baud to 9600 in P3T, save, exit and restart
and voila! I see bytes fly by in the Input section. I see just letters in the
Raw Text window. No text strings etc. and no data in any of the DATA windows.
It's got to be something I'm doing wrong.....

Any help appreciated.

73,
Mike, N1JEZ
AMSAT #29649
Local Area Coordinator
"A closed mouth gathers no feet."

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

22. [dsp] Re: 56002 + P3T

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 16 Nov 2000 17:28:39 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120038-2000.11.16-16.39.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 05:17 PM 11/16/2000, you wrote:
>Howdy,
>
>Anyone got P3T and the EVMDSP56002EVM-RI working? Here's my problem:

Yes, but under 56k serial port.

It can be made to work...I'd triple check the baud rate settings, etc.

What you describe sounds right...but save/exit with 19200 serial??

>Loaded rxpsk400.lod into EVM with DL32. I'm using the 19,200 Leonid.
>COP light flashes regularly. I assume this is a normal heartbeat (or so it
>says in the .asm file)
>I tuned my FT-736R until I get a DCD light followed by a CAT light.
>I loaded Hyperterminal with a direct connect to COM2 (where my EVM lives) at
>19,200.
>I see raw data fine. "THIS IS P3D etc etc."
>
>Now, I run P3T. I've set baud to 19200 and it's highlighted and saved. 512
>byte block. I have checked Raw in Text section. I see nothing for data.......
>
>Here's the fun part------I set Baud to 9600 in P3T, save, exit and restart
>and voila! I see bytes fly by in the Input section. I see just letters in the
>Raw Text window. No text strings etc. and no data in any of the DATA windows.
>It's got to be something I'm doing wrong.....
>
>Any help appreciated.
>
>73,
>Mike, N1JEZ
>AMSAT #29649
>Local Area Coordinator
>"A closed mouth gathers no feet."
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] Re: 56002 + P3T

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 16 Nov 2000 17:34:32 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120041-2000.11.16-16.45.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Are you getting CRCC failures? If so, you might never be getting
any useable data.

Also run Regedit and check that P3T really has the correct baud rate.
(Search for "P3T" in the registry.)

Doug
NA1DB

At 05:17 PM 11/16/00 , you wrote:
>Howdy,
>
>Anyone got P3T and the EVMDSP56002EVM-RI working? Here's my problem:
>
>Loaded rxpsk400.lod into EVM with DL32. I'm using the 19,200 Leonid.
>COP light flashes regularly. I assume this is a normal heartbeat (or so it
>says in the .asm file)
>I tuned my FT-736R until I get a DCD light followed by a CAT light.
>I loaded Hyperterminal with a direct connect to COM2 (where my EVM lives) at
>19,200.
>I see raw data fine. "THIS IS P3D etc etc."
>
>Now, I run P3T. I've set baud to 19200 and it's highlighted and saved. 512
>byte block. I have checked Raw in Text section. I see nothing for data.......
>
>Here's the fun part------I set Baud to 9600 in P3T, save, exit and restart
>and voila! I see bytes fly by in the Input section. I see just letters in the
>Raw Text window. No text strings etc. and no data in any of the DATA windows.
>It's got to be something I'm doing wrong.....
>
>Any help appreciated.
>
>73,
>Mike, N1JEZ
>AMSAT #29649
>Local Area Coordinator
>"A closed mouth gathers no feet."
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

24. [dsp] DSP56002EVM Source

From: "Joel B. Black" <jbblack@mindspring.com>
Date: Thu, 16 Nov 2000 17:16:19 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120047-2000.11.16-17.27.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am new to the list, so please forgive my ignorance. Is there a current,
inexpensive source for the DSP52006EVM? It has been discontinued by
Motorola. Newark no longer carries them and two of the other recommended
vendors (by TAPR) are selling them for around $350. This is an increase of
about $200 over recommended prices!

Tnx es 73,

Joel B. Black, K2SAT

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] Re: 56002 + P3T

From: Mike73@aol.com
Date: Thu, 16 Nov 2000 19:58:06 EST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120060-2000.11.16-19.08.41--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

In a message dated 11/16/00 5:39:23 PM Eastern Standard Time,
dougnad@bellatlantic.net writes:

> Are you getting CRCC failures? If so, you might never be getting
> any useable data.
>
> Also run Regedit and check that P3T really has the correct baud rate.
> (Search for "P3T" in the registry.)
>
> Doug
> NA1DB

Hi Doug,
Checked all above and OK. Still no good soooooo I decided to see if it was a
serial port issue with P3T. I updated my EVM to 57600 and it's working!! Must
be something with 19200 in P3T. BTW, I only tried the 512 byte setting in
P3T. Does 514 work? CRC would be nice....

One more question, if I may, how critical is you tuning for doppler?? I find
the window for decoding to be very small..... also I don't see any up/down
LED's. I thought I'd do mic click until I get doppler via Wisp set up.....

Tnx Doug!

73,
Mike, N1JEZ
AMSAT #29649
Local Area Coordinator
"A closed mouth gathers no feet."

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

26. [dsp] Re: 56002 + P3T

From: Mike73@aol.com
Date: Thu, 16 Nov 2000 19:58:08 EST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120061-2000.11.16-19.11.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

In a message dated 11/16/00 5:34:09 PM Eastern Standard Time,
hammond@surrealnet.net writes:

> At 05:17 PM 11/16/2000, you wrote:
> >Howdy,
> >
> >Anyone got P3T and the EVMDSP56002EVM-RI working? Here's my problem:
>
> Yes, but under 56k serial port.
>
> It can be made to work...I'd triple check the baud rate settings, etc.
>
>
> What you describe sounds right...but save/exit with 19200 serial??

Mark,

It's definately a 19200 issue with P3T..... I'm now at 57600 on the EVM and
decoding OK. I posted a note to Doug about doppler shift and tuning. Care to
comment as well??

Tnx Mark! This is loads of fun!

73,
Mike, N1JEZ
AMSAT #29649
Local Area Coordinator
"A closed mouth gathers no feet."

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

27. [dsp] Re: 56002 + P3T

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 16 Nov 2000 20:17:52 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120067-2000.11.16-19.28.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>Hi Doug,
>Checked all above and OK. Still no good soooooo I decided to see if it was a
>serial port issue with P3T. I updated my EVM to 57600 and it's working!! Must
>be something with 19200 in P3T. BTW, I only tried the 512 byte setting in
>P3T. Does 514 work? CRC would be nice....

Great! Glad you got it going.

Yes, 514 works. Just edit the .asm to say "514" instead of 512. It really
is that easy! It does have functional CRCC that way, according to P3T.

>One more question, if I may, how critical is you tuning for doppler?? I find
>the window for decoding to be very small..... also I don't see any up/down
>LED's. I thought I'd do mic click until I get doppler via Wisp set up.....

VERY critical, actually. (And my lousy VFO/optical tuning thingy on my
TS-790 needs to be replaced, but that's another story..sigh.)

I would have expected the DSP to send the button clicks based on the "tone"
it hears, so the microphone button clicks to move the VFO should be coming
from the EVM...(I doubt Wisp can keep it just right). Apparently, the mic
clicks don't appear to work. That really needs to be fixed to use this
thing unattended (and easier operation in general).

I resorted to using my trusty DSP-93, which DOES have mic clicks and seems
to pick up the bird better with less signal than the 56002EVM (preliminary
observations, anyhow.) At least I could leave the DSP-93 running all day
while I was at work, and it did track the doppler very nicely. It moves
right along with the audio...

What a great day. The first half of the first orbit was like 11 hours
long. AMAZING.

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

28. [dsp] IP based telemetry

From: "Alan K. Adamson" <ne1h@highrf.com>
Date: Fri, 17 Nov 2000 15:54:32 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120188-2000.11.17-15.05.40--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

All,

I posted this to amsat-bb, but who knows if it worked.

I've got live telemetry available on IP at audio.highrf.com port 8081

If you want to watch it from work or whatever, use p3t and connect way.
Please let me know if/how it works!

I was up the entire day yesterday and should be today and the weekend.
Entire day meaning AOS/LOS (Atlanta based) , guess that's almost the whole
day :-)

Alan

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

29. [dsp] Re: IP based telemetry

From: Mike73@aol.com
Date: Fri, 17 Nov 2000 16:36:06 EST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: ne1h@highrf.com
Message-ID: <LYR3532-120192-2000.11.17-15.46.40--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

In a message dated 11/17/00 3:59:44 PM Eastern Standard Time, ne1h@highrf.com
writes:

> Please let me know if/how it works!

It's working.... What modem are you using to decode the telemetry??

73,
Mike, N1JEZ
AMSAT #29649
Local Area Coordinator
"A closed mouth gathers no feet."

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

30. [dsp] Re: what the telemetry means...

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Fri, 17 Nov 2000 19:14:21 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120215-2000.11.17-18.25.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

Can anyone explain how to interpret the SEU spin telemetry data?
The official formula is:

  #100   SEU Spin - Analog   Volts 01   RPM = 2.84 e8 * X ^ -3.7545

But the equation doesn't make sense...

Doug Braun
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

31. [dsp] Re: what the telemetry means...

From: "Lyle Johnson" <wa7gxd@fidalgo.net>
Date: Fri, 17 Nov 2000 17:17:24 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120220-2000.11.17-19.27.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Doug,

I ran it a few times and I think it may make sense.

The ADC is an 8-bit counter. Let's assume it gives us a count of 100

2.84e8 * 100 ^ -3.7545 =

2.84e8 * 3.1e-8 =

8.8 RPM

If the count were 200, the result would be

2.84e8 * 200 ^ -3.7545 =

2.84e8 * 2.3e-9 =

0.65 RPM

***

I looked over the source code for one of the telemtry programs and that
author disregards any telemtry count less than 70 for this computation.

Hope this helps,

Lyle

> -----Original Message-----
> From: bounce-dsp-14408@lists.tapr.org
> [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Douglas Braun &
> Nadia Papakonstantinou
> Sent: Friday, November 17, 2000 4:14 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] Re: what the telemetry means...
>
>
> Hello,
>
> Can anyone explain how to interpret the SEU spin telemetry data?
> The official formula is:
>
>   #100   SEU Spin - Analog   Volts 01   RPM = 2.84 e8 * X ^ -3.7545
>
> But the equation doesn't make sense...
>
> Doug Braun
> NA1DB
>
>
> ---
> You are currently subscribed to dsp as: wa7gxd@email.msn.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

32. [dsp] 56002 & mic click

From: Mike73@aol.com
Date: Sun, 19 Nov 2000 07:45:50 EST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120390-2000.11.19-06.56.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Anyone got the mic click working with the 56002 400 BPSK AO-40 modem code??
I'm decoding very reliably but without mic click, what a pain to tune.......
TNX!

73,
Mike, N1JEZ
AMSAT #29649
Local Area Coordinator
"A closed mouth gathers no feet."

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

33. [dsp] Re: 56002 & mic click

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sun, 19 Nov 2000 08:17:30 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120393-2000.11.19-07.28.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have been in touch with the author, and he says that he is working on
it, not that he has a "real" signal to use as a test case. Stay tuned.

Doug Braun
NA1DB

At 07:45 AM 11/19/00 , you wrote:
>Anyone got the mic click working with the 56002 400 BPSK AO-40 modem code??
>I'm decoding very reliably but without mic click, what a pain to tune.......
>TNX!
>

>73,
>Mike, N1JEZ
>AMSAT #29649
>Local Area Coordinator
>"A closed mouth gathers no feet."
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

34. [dsp] RE: 56002 & mic click

From: "Roger Rehr" <rrehr@epix.net>
Date: Sun, 19 Nov 2000 09:03:43 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120401-2000.11.19-08.16.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi, Mike!

Where can I get the 56002 modem code and notes? Guess Ill need to relearn
about Leonids, etc :)

73,

W3SZ
Roger Rehr

-----Original Message-----
From: bounce-dsp-3291@lists.tapr.org
[mailto:bounce-dsp-3291@lists.tapr.org]On Behalf Of Mike73@aol.com
Sent: Sunday, November 19, 2000 7:46 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] 56002 & mic click

Anyone got the mic click working with the 56002 400 BPSK AO-40 modem code??
I'm decoding very reliably but without mic click, what a pain to tune.......
TNX!

73,
Mike, N1JEZ
AMSAT #29649
Local Area Coordinator
"A closed mouth gathers no feet."

You are currently subscribed to dsp as: RREHR@EPIX.NET
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

35. [dsp] EVM Blues

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Mon, 20 Nov 2000 01:54:09 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120479-2000.11.20-01.05.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello, all.

I built a TAPR EVM interface when they first became available and played
around with it a bit then, getting some filters to work and I believe the
G3RUH modem too, though I am not sure of the last.

I put it away for a long time and just got it out to use as the 400B PSK
modem for P3D.

I tried downloading some of the software, new bios, etc and I have found

that there is no serial port output from the EVM to the computer.

I note the following:

1. The EVM still works fine for filter applications,etc. Also, I can load and flash with bios2 and rxpsk400, and then on powerup the heartbeat light flashes appropriately about 72 times a minute, and the power light comes on and stays on. CAT comes on briefly and then goes out, and DCD comes on and mostly stays on, though I can make it go out by reducing the audio volume coming in, or cranking it up too high. And telemetry files recorded at other pitches don't make it come on...All of that makes me think the EVM is getting and interpreting the telemetry correctly. The host link looks ready to send with RD and TD red and the others green on my RS232 checker, but no data is exchanged.

2. At first the EVM wouldn't load via windows (using EVM56KW) anymore after I tried unsuccessfully to load some of the new software, even if I put the port speed back to 19200 (where it started out); the windows debugging program wouldnn't recognize the EVM on any com port. Then I installed the new bios2 and used leonid to set the clock speed to 40 MHz and the max speed to 57600, and suddenly the EVM would load via EVM56KW all right again and I made progress up to the point shown above.

3. The DL program won't load any files into the EVM (I assume this uses the ONCE port, though I tried both ports). WHen it tries, I just get a message saying "unknown error code 252 (or 0) from the DSP Card 4" each time. I made sure that DL knew which port to use by using both DSPPORT in the autoexec.bat file and specifying -P in the command line. I ran all up and down the speed range from 2400 to 57600 with the same result, resetting the com ports in windows each time. Only the numerical error message varied with port speed.

4. The DOS program EVM56K seems to load things fine, and I have even been able to flash the EPROM so that the EVM powers up with bios two and a filter program in it which works fine. On the ONCE port the RS232 checker lights show TD and RD are orange with activity, the other lines stay green when I use evm56k. When I try to use DL to load, DSR, CD and DTR turn red and RD and TD are red as well. RTS and CTS remain green.

5. When running rxpsk400 I get no indication that the host port is exchanging data at all; no telemetry to Hyperterm, no activity on an RS232 Tester... this is with appropriate audio going into the EVM and the appropriate (it seems) DCD indicator light behavior. The pattern on the RS232 tester suggests that the EVM looks ready to send, though.

6. I loaded bios2 after first setting the clock to 40 MHz (my board is sn 0949A) and the bytes to 514 for block size in the leonid program. I left the port speed at 57600. Then, as I noted above, I loaded rxpsk400 and flashed it. It powered up with power and heartbeat lights looking OK, etc and the Host port looking ready to send. But not doing so. When I close hyperterminal, DSR, DTR, and CD all turn red as I think they should. I varied handshaking on the com port from xon-xoff to hardware to none...no difference...

So it seems that (1) something is wrong with the ONCE port; it doesn't work with DL (I never tried it before, so I can't be sure this is new), but it works fine with dos and now again with the windows debugger/loader after I reset the parameters noted above in leonid. And more important, (2) there is no indication by LED's, hyperterminal (or P3T for that matter), or RS232 tester of any activity on the HOST port when the rxpsk400 modem program is running, and there is good audio input into the EVM, using the same wave files that caused my DSP_2232 to send telemetry to the computer, and the DCD suggests the EVM knows it is receiving good telemetry. I hope all of this is software settings, but I don't really know...

Any thoughts, other than that I really don't know what I am doing?? My next step would be to find a simple program that lets me slowly send data out the serial port, to see if that works...but I don't yet know how to do even that on the EVM...

THanks in advance...

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

36. [dsp] Re: EVM Blues

From: "Kelly Jordan" <kjordan@marathon.lakeheadu.ca>
Date: Mon, 20 Nov 2000 06:55:39 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120492-2000.11.20-06.06.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Where do you get EVM56KW from?

> 2. At first the EVM wouldn't load via windows (using EVM56KW) anymore
> after I tried unsuccessfully to load some of the new software, even if I
> put the port speed back to 19200 (where it started out); the windows
> debugging program wouldnn't recognize the EVM on any com port. Then I
> installed the new bios2 and used leonid to set the clock speed to 40 MHz
> and the max speed to 57600, and suddenly the EVM would load via EVM56KW
> all right again and I made progress up to the point shown above.

The DL program uses the host port. I spent several hours yesteday getting
this to work. After taking some very close looks at the pictures from the
evm_ri, I noticed the memory jumper on the evm is supposed to be in the
16k position, not the 32k position. Once I moved the jumper, re-downloaded
all the files, the DL program worked as it was supposed to. So did the BIOS2.

I am using the latest files from memebers.bellatlantic.net/~dougnad

> 3. The DL program won't load any files into the EVM (I assume this uses
> the ONCE port, though I tried both ports). WHen it tries, I just get a
> message saying "unknown error code 252 (or 0) from the DSP Card 4" each
> time. I made sure that DL knew which port to use by using both DSPPORT in
> the autoexec.bat file and specifying -P in the command line. I ran all up
> and down the speed range from 2400 to 57600 with the same result,
> resetting the com ports in windows each time. Only the numerical error
> message varied with port speed.

I am in a similiar position. I was getting garbage out the serial port with the
test P3D 400 bps wave file. Did some more playing around and now get
nothing except for the three characters from bios2 on boot up out the host
port. I am using the same hardware as you are - an earlier evm56k with the
40MHz 56002 and the tapr evm_ri.

> 5. When running rxpsk400 I get no indication that the host port is
> exchanging data at all; no telemetry to Hyperterm, no activity on an RS232
> Tester... this is with appropriate audio going into the EVM and the
> appropriate (it seems) DCD indicator light behavior. The pattern on the
> RS232 tester suggests that the EVM looks ready to send, though.

Ain't this fun!

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

37. [dsp] AO-40's Vhf Omni Antanna polarization

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 20 Nov 2000 09:37:51 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120519-2000.11.20-08.48.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

As far as I know, AO-40's 2-meter omni antenna is simply a
1/4-wave ground plane, so its signal should have more-or-less
linear polarization. Also, I assume its axis is parallel
to the satellite's spin axis, so the polarization is not
rapidly changing. Does anyone know if it is possible
to use ALON/ALAT values to calculate the polarization
angle at the receiver? I don't have a CP antenna for 2 meters,
and it would be cool if a tracking program could tell me
how to orient the antenna's polarization...

Doug Braun
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

38. [dsp] Re: EVM Blues

From: "Frederick M. Spinner" <fspinner@hotmail.com>
Date: Mon, 20 Nov 2000 14:38:26 GMT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120520-2000.11.20-09.04.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi.. I just had to relearn the EVM also.. one mistake I immediately
see is that the DL program works with the HOST port, not the once
port.

In a nutshell, this is what I did to get mine to go.

Got the newest 57600 baud bios and files from Doug Braun's website
http://members.bellatlantic.net/~dougnad/

used the Domain Tech debugger to load (through the OnCE port) the
following files (after assembly):

l bios2.lod
l fsk1200.lod
l flshboot.lod

then I did the GO 3400 to flash this.

Then I verified, using the PMP12K program with the distribution,
that I could talk to the 1200 baud packet modem with PMP at the
57600 baud rate on the HOST port.

After this I did a (on my COM2: port) a DL -p2 -l rxpsk400 (or was
it DL -p2 -t rxpsk400.. I don't remember off the top of my head.. it
needs the port to be specified if it isn't com1.. I don't think it
works on non-COM1: or COM2:)

The heartbeat comes up. Now to get the modem to do anything (at all
no data goes until it locks) I initially send the 400 baud psk frames
to it (on the tapr website) from the soundcard. After a couple of
trys it locks. Next, try AO-40. Tuning is critical.. and there has
to be a "modem lock" and a "frame lock" for the modem to send data
to P3T or hyperterm or whatever. I do not know which LED's they
light on a TAPR RI, as I built my interface prior to TAPR offering
theirs.

I hope this info helps. It took me about 4 hours to figure out how
to load the puppy again.

Fred Spinner, W0FMS

>From: "Roger Rehr W3SZ" <rrehr@epix.net>
>Reply-To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>Subject: [dsp] EVM Blues
>Date: Mon, 20 Nov 2000 01:54:09 -0500
>
>Hello, all.
>
>I built a TAPR EVM interface when they first became available and played
>around with it a bit then, getting some filters to work and I believe the
>G3RUH modem too, though I am not sure of the last.
>
>I put it away for a long time and just got it out to use as the 400B PSK
>modem for P3D.
>
>I tried downloading some of the software, new bios, etc and I have found
>that there is no serial port output from the EVM to the computer.
>
>I note the following:
>
>1. The EVM still works fine for filter applications,etc. Also, I can load
>and flash with bios2 and rxpsk400, and then on powerup the heartbeat light

>flashes appropriately about 72 times a minute, and the power light comes on
>and stays on. CAT comes on briefly and then goes out, and DCD comes on and
>mostly stays on, though I can make it go out by reducing the audio volume
>coming in, or cranking it up too high. And telemetry files recorded at
>other pitches don't make it come on...All of that makes me think the EVM is
>getting and interpreting the telemetry correctly. The host link looks
>ready
>to send with RD and TD red and the others green on my RS232 checker, but no
>data is exchanged.
>
>2. At first the EVM wouldn't load via windows (using EVM56KW) anymore
>after
>I tried unsuccessfully to load some of the new software, even if I put the
>port speed back to 19200 (where it started out); the windows debugging
>program wouldnn't recognize the EVM on any com port. Then I installed the
>new bios2 and used leonid to set the clock speed to 40 MHz and the max
>speed
>to 57600, and suddenly the EVM would load via EVM56KW all right again and I
>made progress up to the point shown above.
>
>3. The DL program won't load any files into the EVM (I assume this uses
>the
>ONCE port, though I tried both ports). WHen it tries, I just get a message
>saying "unknown error code 252 (or 0) from the DSP Card 4" each time. I
>made sure that DL knew which port to use by using both DSPPORT in the
>autoexec.bat file and specifying -P in the command line. I ran all up and
>down the speed range from 2400 to 57600 with the same result, resetting the
>com ports in windows each time. Only the numerical error message varied
>with port speed.
>
>4. The DOS program EVM56K seems to load things fine, and I have even been
>able to flash the EPROM so that the EVM powers up with bios two and a
>filter
>program in it which works fine. On the ONCE port the RS232 checker lights
>show TD and RD are orange with activity, the other lines stay green when I
>use evm56k. When I try to use DL to load, DSR, CD and DTR turn red and RD
>and TD are red as well. RTS and CTS remain green.
>
>5. When running rxpsk400 I get no indication that the host port is
>exchanging data at all; no telemetry to Hyperterm, no activity on an RS232
>Tester... this is with appropriate audio going into the EVM and the
>appropriate (it seems) DCD indicator light behavior. The pattern on the
>RS232 tester suggests that the EVM looks ready to send, though.
>
>6. I loaded bios2 after first setting the clock to 40 MHz (my board is sn
>0949A) and the bytes to 514 for block size in the leonid program. I left
>the port speed at 57600. Then, as I noted above, I loaded rxpsk400 and
>flashed it. It powered up with power and heartbeat lights looking OK, etc
>and the Host port looking ready to send. But not doing so. When I close
>hyperterminal, DSR, DTR, and CD all turn red as I think they should. I
>varied handshaking on the com port from xon-xoff to hardware to none...no
>difference...
>
>So it seems that (1) something is wrong with the ONCE port; it doesn't work
>with DL (I never tried it before, so I can't be sure this is new), but it
>works fine with dos and now again with the windows debugger/loader after I
>reset the parameters noted above in leonid. And more important, (2) there
>is no indication by LED's, hyperterminal (or P3T for that matter), or RS232
>tester of any activity on the HOST port when the rxpsk400 modem program is
>running, and there is good audio input into the EVM, using the same wave
>files that caused my DSP_2232 to send telemetry to the computer, and the
>DCD
>suggests the EVM knows it is receiving good telemetry. I hope all of this
>is software settings, but I don't really know...
>
>Any thoughts, other than that I really don't know what I am doing?? My
>next
>step would be to find a simple program that lets me slowly send data out
>the
>serial port, to see if that works...but I don't yet know how to do even
>that
>on the EVM...
>
>THanks in advance...
>
>73,
>
>Roger Rehr
>W3SZ ex AA3QK, WA3JYM FN20ah

>2 Merrymount Road
>Reading, PA 19609-1718
>http://www.epix.net/~rrehr/w3sz.htm
>
>
>---
>You are currently subscribed to dsp as: FSPINNER@HOTMAIL.COM
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

_____
Get Your Private, Free E-mail from MSN Hotmail at http://www.hotmail.com.

Share information about yourself, create your own public profile at
http://profiles.msn.com.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

39. [dsp] RE: AO-40's Vhf Omni Antanna polarization

From: "Lyle Johnson" <wa7gxd@fidalgo.net>
Date: Mon, 20 Nov 2000 08:27:03 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120536-2000.11.20-10.38.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Doug,

You are correct - the omni antennas are in line with the spin axis and are
on the opposite side of the spacecraft from the 400N motor.

At 2 meters, there is a fair bit of ionospheric interaction that results in
the signal rotating as it passes through. Thus, it is not possible to
predict accurately what the polarization of the received signal will be.

I think G3RUH wrote an article that expalins the "bahn" coordinate system -
check his articles on the AMSAT.ORG website.

73,

Lyle

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

40. [dsp] Re: IP based telemetry

From: Jim Sanford <wb4gcs@amsat.org>
Date: Mon, 20 Nov 2000 17:01:09 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120599-2000.11.20-16.13.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alan:
Just tried connecting with P3T (remote client) and get error connecting to
audio.highrf.com

Thanks for the service and any possible assistance.

73,
Jim
wb4gcs@amsat.org

"Alan K. Adamson" wrote:

> All,
>
> I posted this to amsat-bb, but who knows if it worked.
>
> I've got live telemetry available on IP at audio.highrf.com port 8081
>
> If you want to watch it from work or whatever, use p3t and connect way.
> Please let me know if/how it works!

>
> I was up the entire day yesterday and should be today and the weekend.
> Entire day meaning AOS/LOS (Atlanta based) , guess that's almost the whole
> day :-)
>
> Alan
>
> ---
> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

41. [dsp] Re: IP based telemetry

From: Jim Sanford <wb4gcs@amsat.org>
Date: Mon, 20 Nov 2000 17:06:48 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120602-2000.11.20-16.18.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Alan:
Tried it again, now it works. Ignore my previous question.

Thanks again.

73,
jim
wb4gcs@amsat.org

"Alan K. Adamson" wrote:

> All,
>
> I posted this to amsat-bb, but who knows if it worked.
>
> I've got live telemetry available on IP at audio.highrf.com port 8081
>
> If you want to watch it from work or whatever, use p3t and connect way.
> Please let me know if/how it works!
>
> I was up the entire day yesterday and should be today and the weekend.
> Entire day meaning AOS/LOS (Atlanta based) , guess that's almost the whole
> day :-)
>
> Alan
>
> ---
> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

42. [dsp] Re: IP based telemetry

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 20 Nov 2000 17:12:29 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120603-2000.11.20-16.23.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I find you have to "massage" P3T in the TCP/IP feature, too. Be sure to
SAVE both the port and the IP address....then quit P3T and restart it. (You
may even have to "highlight" the port and IP address, and then save.)

When it works, the connection is almost instantaneous.

Be persistant :)

73,

Mark

At 05:01 PM 11/20/2000, you wrote:
>Alan:
>Just tried connecting with P3T (remote client) and get error connecting to
>audio.highrf.com
>
>Thanks for the service and any possible assistance.
>
>73,
>Jim
>wb4gcs@amsat.org
>
>
>"Alan K. Adamson" wrote:
>
> > All,
> >
> > I posted this to amsat-bb, but who knows if it worked.
> >
> > I've got live telemetry available on IP at audio.highrf.com port 8081
> >
> > If you want to watch it from work or whatever, use p3t and connect way.
> > Please let me know if/how it works!
> >
> > I was up the entire day yesterday and should be today and the weekend.
> > Entire day meaning AOS/LOS (Atlanta based) , guess that's almost the whole
> > day :-)
> >
> > Alan

Mark L. Hammond [N8MH]

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

43. [dsp] question about CRC and AO-40 telemetry

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 20 Nov 2000 19:39:00 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120629-2000.11.20-18.49.40--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

This question came to mind the other day...

With CRC "on", I understand that blocks not passing are basically thrown
out, or disregarded. So, a block failing CRC isn't much good.

My question is this--if a packet PASSES CRC, what it the probability that
it really IS a good block of data? Or put another way--what is the error
rate for the CRC used in the AO-40 telemetry? 1/1000? 1/100,000?

Just curious...

73,

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

44. [dsp] RE: question about CRC and AO-40 telemetry

From: "Lyle Johnson" <wa7gxd@fidalgo.net>
Date: Mon, 20 Nov 2000 17:13:40 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120639-2000.11.20-19.26.49--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Being that it is 16-bit, I suspect it is 1/65536 or 99.998% depending on the
number of bits in error.

I've been wrong before...

Lyle

> -----Original Message-----
> From: bounce-dsp-14408@lists.tapr.org
> [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Mark L. Hammond
> Sent: Monday, November 20, 2000 4:39 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] question about CRC and AO-40 telemetry
>
>
> This question came to mind the other day...
>
> With CRC "on", I understand that blocks not passing are basically thrown
> out, or disregarded. So, a block failing CRC isn't much good.
>
> My question is this--if a packet PASSES CRC, what it the probability that
> it really IS a good block of data? Or put another way--what is the error
> rate for the CRC used in the AO-40 telemetry? 1/1000? 1/100,000?
>
> Just curious...
>
> 73,
>
> Mark L. Hammond [N8MH]
>
>
> ---
> You are currently subscribed to dsp as: wa7gxd@email.msn.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

45. [dsp] Re: EVM Blues

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Mon, 20 Nov 2000 23:08:10 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120659-2000.11.20-22.19.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks Fred for the very helpful note!

DL works for checking the EVM...if I use dl -x I get the version message,
but trying to use it for loading files causes the dos window to lock up.

I downloaded the wav files and find that I can get DCD with them, but not
the lock. I have a P3D file I recorded that achieved lock once or twice
today and I actually then got output to both hyperterm and then even to P3T,
but have not been able to achieve lock since then...very strange...

I tried restarting the EVM numerous times and even reflashing it...same
story...DCM lights but no CAT (lock) light and no telemetry. But the fact
that it DID it means to me things are OK...just a timing error perhaps??

But this is much farther than I was able to get yesterday, and your
suggestions paved the way!

Thanks again, Fred!!

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

-----Original Message-----
From: bounce-dsp-3291@lists.tapr.org
[mailto:bounce-dsp-3291@lists.tapr.org]On Behalf Of Frederick M. Spinner
Sent: Monday, November 20, 2000 9:38 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] Re: EVM Blues

Hi.. I just had to relearn the EVM also.. one mistake I immediately
see is that the DL program works with the HOST port, not the once
port.

In a nutshell, this is what I did to get mine to go.

Got the newest 57600 baud bios and files from Doug Braun's website
http://members.bellatlantic.net/~dougnad/

used the Domain Tech debugger to load (through the OnCE port) the
following files (after assembly):

l bios2.lod
l fsk1200.lod
l flshboot.lod

then I did the GO 3400 to flash this.

Then I verified, using the PMP12K program with the distribution,
that I could talk to the 1200 baud packet modem with PMP at the
57600 baud rate on the HOST port.

After this I did a (on my COM2: port) a DL -p2 -l rxpsk400 (or was
it DL -p2 -t rxpsk400.. I don't remember off the top of my head.. it
needs the port to be specified if it isn't com1.. I don't think it
works on non-COM1: or COM2:)

The heartbeat comes up. Now to get the modem to do anything (at all
no data goes until it locks) I initially send the 400 baud psk frames
to it (on the tapr website) from the soundcard. After a couple of
trys it locks. Next, try AO-40. Tuning is critical.. and there has
to be a "modem lock" and a "frame lock" for the modem to send data
to P3T or hyperterm or whatever. I do not know which LED's they
light on a TAPR RI, as I built my interface prior to TAPR offering
theirs.

I hope this info helps. It took me about 4 hours to figure out how
to load the puppy again.

Fred Spinner, W0FMS

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

46. [dsp] Re: EVM Blues

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Mon, 20 Nov 2000 23:48:19 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120667-2000.11.20-23.00.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi, Kelly, Mike, Fred, and Doug!

Thanks for the note! To answer questions:

Its been so long I don't remember whether I got the EVM directly from
Motorola, or from a vendor they sent me to...it was long ago...before the
TAPR enclosure, even...
1. DL problems
The DL program works if I do 'DL -x' or if I do 'DL -g rxpsk400.lod' but if
I try to use it to load echo.lod (an old test file from Motorola) it loads
it but sayd 'No response from the DSP CARD 4' and then nothing else will
load via DL until I reboot the EVM. Same thing happens if I try to load
'bios2' using DL. I don't know if my having flashed the EVM with bios2 and
rxpsk400 affects the ability to load lod files with DL. rxpsk400 is the
only file that seems to load via DL at this point.

2. Some progress with the rxpsk400 program
I actually got both DCD and CAT lit briefly with a wave file of what I
recorded off the air yesterday. But I haven't been able to reproduce
getting CAT to light again. DCD lights with this file and with both the A
block and Pure SIgnal wave files I downloaded from TAPR FTP. But the CAT
light doesn't. When both CAT and DCD were lit I was able to get data to
both Hyperterminal and P3T from the EVM that looked fine. DOn't know why it
would work once and not again. IT also seems strange that it would work
with a file I got off the air and not with the files off of TAPR website!!

Ive varied the audio input levels all over the map...DCD lights reliably but
not CAT. I've reloaded the EVM with no joy resulting.

3. Answers to questions about my problems
Jumpers were all OK, and I had discovered yesterday the 'stealing' of a com
port by dos as long as the dos window is open...

So, It worked briefly and seems that the serial port is OK (now that I know
which one to use). BUt the CAT light won't come on and thus no
telemetry...A timing problem? Could 40 MHz not be right for MY DSP5002??

Thanks again in advance for the collective wisdom!!

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

47. [dsp] P3D Telemetry on Sound Card?

From: "Matthew Ettus" <matt@ettus.com>
Date: Tue, 21 Nov 2000 13:56:56
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120779-2000.11.21-14.07.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Does anyone know of 400 baud PSK decoding software for a sound card so that
we can receive P3D telemetry without dsp hardware?

I saw mention of one pointing to AMSAT France, and someone named Ghislain,
but could only find his program for generating test waveforms, not
decoding.

Thanks
Matt

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

48. [dsp] Re: P3D Telemetry on Sound Card?

From: John Wood <john@otherlife.net>
Date: Tue, 21 Nov 2000 13:44:00 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120789-2000.11.21-15.55.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Matthew:
    I've been wondering about this as well. If you get any email indicating
that such
a software program exists I would appreciate hearing about it.

Thanks and 73,

John, KF6HFA

Matthew Ettus wrote:

> Does anyone know of 400 baud PSK decoding software for a sound card so that
> we can receive P3D telemetry without dsp hardware?
>
> I saw mention of one pointing to AMSAT France, and someone named Ghislain,
> but could only find his program for generating test waveforms, not
> decoding.
>
> Thanks
> Matt

>
> ---
> You are currently subscribed to dsp as: john@otherlife.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

--
John Wood, KF6HFA, 510.234.0527, john@otherlife.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

49. [dsp] Re: EVM Blues===> Success!

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Tue, 21 Nov 2000 19:15:24 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120814-2000.11.21-18.27.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello, All!

Just a note to let everyone know that thanks to the suggestions I received from the list I have gotten the EVM to copy the A block telemetry successfully and send it to P3T where the CRCC is OK and the data displays fine.

THANKS ALL!!!

The keys were I think
1. resetting xtal to 68 MHz and
2. setting RInputGain from 0 to 15. PLEASE DON'T ASK HOW IT GOT TO BE ZERO!!! I think it has something to do with starting all of this after last weekend's EME contest. Start contest Friday PM. No sleep Friday night. No sleep Saturday night. Work contest till moon set Sunday at 1 PM. Then start on EVM project. As it says on my web page...maybe sleep is important ;)

ANYWAY, THANKS AGAIN!!

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

50. [dsp] dsp] P3D Telemetry on Sound Card? How it works!

From: "nils.schiffhauer" <nils.schiffhauer@metronet.de>
Date: Wed, 22 Nov 2000 08:19:08 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120876-2000.11.22-01.28.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,
telemetry from AO-40 has been successfully decoded just with the soundcard only with WPSKDEC, available from www.amsat-france.org.
Follow these steps:
* fill out a short register form
* download the software
* explode the zipped file into a folder
* tune into 145,898 kHz when the bird sings
* tune your radio (even a scanner will lead to results) so that the center frequency of the BPSK signals reads in the range of 1.200 Hz to 1.600 Hz (SPECTROGRAM is a great help to do this precisely with PC/soundcard, look at: www.monumental.com/rshorne/gram.html)
* make a sound clipping (8.000 Hz sampling, 8 bit resolution) as a wav-file
* name it "P3D.WAV", it will overwrite the test file carrying the same name in this file
* start (doubleclick) the programme PSKDEM.EXE
* the DOS window will start prompting for the more or lesse exakt center

frequency in Hz
* RETURN, and the demodulation will start instantly, writing the text
automatically into BIN-File "P3D.BIN"
* after demodulation, close this window and start (doubleclick) file
TLMDEC.EXE to automatically convert the BIN-file into easy-to-read
telemetry text

Although sounding a bit complicated, it seems to be fool-proof for it
worked just at the very first attempt on my PC...
With nothing more than a handheld scanner and a laptop it's great to
demonstrate amateur radio's state-of-the-art. The guys form AMSAT-France
are working on a Windows & Linux version - keep tuned.

73, Nils, DK8OK

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

51. [dsp] EVMs

From: Charles Brain <chbrain@dircon.co.uk>
Date: Wed, 22 Nov 2000 09:52:37 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120885-2000.11.22-04.11.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

Does anyone know of an online retailer that has 56303EVMs I am looking at trying to port some of my
56002
code to a newer platform.

As dspdev seems to have been killed off I am trying here!

- Charles G4GUO

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

52. [dsp] Re: dsp] P3D Telemetry on Sound Card? How it works!

From: Boris.Smeds@esa.int
Date: Wed, 22 Nov 2000 11:26:46 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120886-2000.11.22-04.40.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I looked at the amsat-france webpage at
http://www.ccr.jussieu.fr/physio/amsat-france/eindex1.htm
but could not find the WPSKDEC program.
Does anyone know where it is located?
73
Boris SM7GJ DJ0EX

"nils.schiffhauer" <nils.schiffhauer@metronet.de> on 2000-11-22 08:19:08

Please respond to "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
cc: (bcc: Boris Smeds/esoc/ESA)
Subject: [dsp] dsp] P3D Telemetry on Sound Card? How it works!

Hi,
telemetry from AO-40 has been successfully decoded just with the
soundcard only with WPSKDEC, available from www.amsat-france.org.
Follow these steps:
* fill out a short register form
* download the software
* explode the zipped file into a folder
* tune into 145,898 kHz when the bird sings
* tune your radio (even a scanner will lead to results) so that the
center frequency of the BPSK signals reads in the range of 1.200 Hz to
1.600 Hz (SPECTROGRAM is a great help to do this precisely with
PC/soundcard, look at: www.monumental.com/rshorne/gram.html)

* make a sound clipping (8.000 Hz sampling, 8 bit resolution) as a
wav-file
* name it "P3D.WAV", it will overwrite the test file carrying the same
name in this file
* start (doubleclick) the programme PSKDEM.EXE
* the DOS window will start prompting for the more or lesse exakt center
frequency in Hz
* RETURN, and the demodulation will start instantly, writing the text
automatically into BIN-File "P3D.BIN"
* after demodulation, close this window and start (doubleclick) file
TLMDEC.EXE to automatically convert the BIN-file into easy-to-read
telemetry text

Although sounding a bit complicated, it seems to be fool-proof for it
worked just at the very first attempt on my PC...
With nothing more than a handheld scanner and a laptop it's great to
demonstrate amateur radio's state-of-the-art. The guys form AMSAT-France
are working on a Windows & Linux version - keep tuned.

73, Nils, DK8OK

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

53. [dsp] Re: dsp] P3D Telemetry on Sound Card? How it works!

From: Alberto di Bene <dibene@usa.net>
Date: Wed, 22 Nov 2000 11:38:31 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120887-2000.11.22-04.50.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Boris.Smeds@esa.int wrote:

> I looked at the amsat-france webpage at
> http://www.ccr.jussieu.fr/physio/amsat-france/eindex1.htm
> but could not find the WPSKDEC program.
> Does anyone know where it is located?
> 73
> Boris SM7GJ DJ0EX
>

Hmmm, I have just downloaded it from that URL. Just click
on the prominent WPSKDEC word (underlined) just at the
beginning of the page.
This is a copy-and-paste of the initial part of the page.

Les Télémesures sont trés bien reçues en France.

Et grace au logiciel de Christophe et Ghislain F1HDD WPSKDEC elle sont trés bien décodées.

Exemple de télémesures décodées

73
Alberto   I2PHD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

54. [dsp] P3D Telemetry on Sound Card? URL found.

From: Boris.Smeds@esa.int
Date: Wed, 22 Nov 2000 12:15:57 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-120890-2000.11.22-05.29.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I found the URL for the download of the WPSKDEC software from the french version
of the amsat-france web page at
http://www.ccr.jussieu.fr/physio/amsat-france/index.htm

The download is at http://rackoon.thomson-csf.fr/amsatf.htm.

Regards
Boris
SM7GJ DJ0EX

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

55. [dsp] P3D 400 BSPK telemetry help

From: "Nino Porcino" <porcino@sysonline.it>
Date: Thu, 23 Nov 2000 16:45:56 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121231-2000.11.23-10.00.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

I'm in the attempt of writing a decoder for the P3D telemetry and I'm
encountering some problem while decoding the 400 bps BPSK bitstream.

First of all, the waveform of the signal does not looks like a "true" BPSK,
I mean it's not like PSK31 or PSK63F, but looks like having a "hole" at its
centre. Is there any particular reason for that?

Altought I can decode the phase very well (it is quite stable at 0° and
180°), it does not lead to any significant ASCII data. I can't ever see a
single "P" of the synch block :-(. Perhaps there is something I've not
understood with differential encoding. Tell me, phase change is "0" bit, and
phase unchanged is "1" bit? Is that right? Or there is something else I've
not considered?

Any help would be very very appreciated as I'm very close to the solution
and dont want to drop it just now. BTW the decoder will be soundcard-based
(Win9x) and will distribuited for free.

Thanks in advance,

- Nino IZ8BLY

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

56. [dsp] RE: P3D 400 BSPK telemetry help

From: "Lyle Johnson" <wa7gxd@fidalgo.net>
Date: Thu, 23 Nov 2000 08:51:22 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121248-2000.11.23-11.02.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi!

The "P" is just filler. You need to do a search for the sync vector on a
bitwise basis.

You may want to look at the EVM source code for clues as to what you may be
doing differently.

Regards,

Lyle

> -----Original Message-----
> From: bounce-dsp-14408@lists.tapr.org
> [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Nino Porcino
> Sent: Thursday, November 23, 2000 7:46 AM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] P3D 400 BSPK telemetry help
>

>
> Hello,
>
> I'm in the attempt of writing a decoder for the P3D telemetry and I'm
> encountering some problem while decoding the 400 bps BPSK bitstream.
>
> First of all, the waveform of the signal does not looks like a
> "true" BPSK,
> I mean it's not like PSK31 or PSK63F, but looks like having a
> "hole" at its
> centre. Is there any particular reason for that?
>
> Altought I can decode the phase very well (it is quite stable at 0° and
> 180°), it does not lead to any significant ASCII data. I can't ever see a
> single "P" of the synch block :-(. Perhaps there is something I've not
> understood with differential encoding. Tell me, phase change is
> "0" bit, and
> phase unchanged is "1" bit? Is that right? Or there is something else I've
> not considered?
>
> Any help would be very very appreciated as I'm very close to the solution
> and dont want to drop it just now. BTW the decoder will be soundcard-based
> (Win9x) and will distribuited for free.
>
> Thanks in advance,
>
> - Nino IZ8BLY
>
>
>
> ---
> You are currently subscribed to dsp as: wa7gxd@email.msn.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

57. [dsp] EVM query

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Thu, 23 Nov 2000 20:25:32 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121272-2000.11.23-19.36.57--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello, All!

I had, with the help of the group, gotten my EVM to work running Rxpsk400
etc. I flashed things to the EPROM and all was well.

Then I tried to get fancy and sent some things to the EPROM so that with it
in the socket the EVM won't boot...the green PLL lock light never comes on
and I can't load anything via the serial ports.

If I take out the EPROM then all is well and both serial ports work fine...

EXCEPT THAT I DL.exe won't work...it does not see the EVM hooked up to the
host port, even with bios2 loaded into the EVM. When I do 'dl -x' I get the
message 'no response from the DSP CARD 4'. I have made sure that the
correct dsp port and baud rate are specified as system variables, and have
also tried putting them explicitly in the command line to make sure that dl
knows where to send the data and at what speed. No go. All of this worked
before I put junk in the EPROM. This is a pain as it means I must load
using the ONCE port and then switch to the HOST port to use the program each
time.

Is is so that DL.exe will not work unless the EPROM is in place? If this is
not the explanation for what I am experiencing, what is likely going on?
The host port works fine for communications with the rxpsk400 program, etc.
so its not a problem with all communication via the port.

How do I get the junk out of the EPROM short of getting an eprom programmer?
If I need one, any suggestions on which one to get or ones to avoid?

I've found some (MOD-EP1 or MOD-UP) by modular circuit technology for
$199.99 at JDR, and one from Hi-LO Systems for $129.95 at Jameco.

Anyone know where I can pick up 1 or 2 EPROMs AT29C256-12PC? I've called
the vendors and ATMEL and can't find any for sale in small quantities and I
was quoted a 30 WEEK lead time!! ATMEL said they'd check on samples and
call if they had any...no call back to me.

THanks in advance..

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

58. [dsp] Re: EVM query

From: forrerj@peak.org (Johan Forrer)
Date: Thu, 23 Nov 2000 20:01:25 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121284-2000.11.23-22.12.46--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Roger,

I have been in that boat too :)

Getting hold of an EPROM programmer is the safest way, but I have in once
fixed the problem by first removeing the Flash chip, booting up the
software, then re-inserted the Flash part on the live running system. It
worked! However, cannot guarantee it --- I don't think you can cause too
much damage as long as you don't make any mistakes with orienting the part
or offsetting pins etc...

Just a thought in good ham spirit and ingenuity. Good luck, 73

Johan, KC7WW

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>
>I had, with the help of the group, gotten my EVM to work running Rxpsk400
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>Then I tried to get fancy and sent some things to the EPROM so that with it
>in the socket the EVM won't boot...the green PLL lock light never comes on
>and I can't load anything via the serial ports.
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>host port, even with bios2 loaded into the EVM. When I do 'dl -x' I get the
>message 'no response from the DSP CARD 4'. I have made sure that the
>correct dsp port and baud rate are specified as system variables, and have
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>was quoted a 30 WEEK lead time!! ATMEL said they'd check on samples and
>call if they had any...no call back to me.
>
>THanks in advance..
>
>73,
>
>Roger Rehr
>W3SZ ex AA3QK, WA3JYM FN20ah
>2 Merrymount Road
>Reading, PA 19609-1718
>http://www.epix.net/~rrehr/w3sz.htm
>
>
>---
>You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
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>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

59. [dsp] Re: EVM query

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Thu, 23 Nov 2000 23:18:37 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121286-2000.11.23-22.30.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi, Johan!

Thanks for the tip...it worked and all is well...

Happy Thanksgiving!!!

PS I've been digesting all of the great stuff you've done since I got the
EVM about 1.5 years ago (I think that time is right)...Thanks for all of
that, too!!

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

-----Original Message-----
From: bounce-dsp-3291@lists.tapr.org
[mailto:bounce-dsp-3291@lists.tapr.org]On Behalf Of Johan Forrer
Sent: Thursday, November 23, 2000 11:01 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Re: EVM query

Roger,

I have been in that boat too :)

Getting hold of an EPROM programmer is the safest way, but I have in once
fixed the problem by first removeing the Flash chip, booting up the
software, then re-inserted the Flash part on the live running system. It
worked! However, cannot guarantee it --- I don't think you can cause too
much damage as long as you don't make any mistakes with orienting the part
or offsetting pins etc...

Just a thought in good ham spirit and ingenuity. Good luck, 73

Johan, KC7WW

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>host port, even with bios2 loaded into the EVM. When I do 'dl -x' I get
the
>message 'no response from the DSP CARD 4'. I have made sure that the
>correct dsp port and baud rate are specified as system variables, and have
>also tried putting them explicitly in the command line to make sure that dl
>knows where to send the data and at what speed. No go. All of this worked
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>
>Anyone know where I can pick up 1 or 2 EPROMs AT29C256-12PC? I've called
>the vendors and ATMEL and can't find any for sale in small quantities and I
>was quoted a 30 WEEK lead time!! ATMEL said they'd check on samples and
>call if they had any...no call back to me.
>
>THanks in advance..
>
>73,
>
>Roger Rehr
>W3SZ ex AA3QK, WA3JYM FN20ah
>2 Merrymount Road
>Reading, PA 19609-1718
>http://www.epix.net/~rrehr/w3sz.htm
>
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You are currently subscribed to dsp as: RREHR@EPIX.NET
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---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

60. [dsp] EVM

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Thu, 23 Nov 2000 23:21:47 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121287-2000.11.23-22.33.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello to all...

I got everything working...Johan KC7WW suggested I try CAREFULLY inserting
the EPROM after powering up. We both understood what bad things COULD
happen with this approach.

I did this and re-flashed the eprom. It worked and all is well.

Can't wait for the next P3D Pass!

Thanks to all, and HAPPY THANKSgiving!

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

61. [dsp] Re: EVM query

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Thu, 23 Nov 2000 23:25:35 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121288-2000.11.23-22.36.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Roger,

I had to do exactly as Johan described as a fix (for the problem you
describe below)--pull the chip and reinsert in a live EVM. It's scary
indeed, but what else was I to do? heh...I got lucky and it worked.

73,

Mark N8MH

At 11:01 PM 11/23/2000, you wrote:
>Roger,
>
>I have been in that boat too :)
>
>Getting hold of an EPROM programmer is the safest way, but I have in once
>fixed the problem by first removeing the Flash chip, booting up the
>software, then re-inserted the Flash part on the live running system. It
>worked! However, cannot guarantee it --- I don't think you can cause too
>much damage as long as you don't make any mistakes with orienting the part
>or offsetting pins etc...
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>Just a thought in good ham spirit and ingenuity. Good luck, 73
>
>
>Johan, KC7WW
>
>
>
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> >
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> >message 'no response from the DSP CARD 4'. I have made sure that the
> >correct dsp port and baud rate are specified as system variables, and have
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> >
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> >
> >Anyone know where I can pick up 1 or 2 EPROMs AT29C256-12PC? I've called
> >the vendors and ATMEL and can't find any for sale in small quantities and I
> >was quoted a 30 WEEK lead time!! ATMEL said they'd check on samples and
> >call if they had any...no call back to me.
> >
> >THanks in advance..
> >
> >73,
> >
> >Roger Rehr
> >W3SZ ex AA3QK, WA3JYM FN20ah
> >2 Merrymount Road
> >Reading, PA 19609-1718
> >http://www.epix.net/~rrehr/w3sz.htm
> >
> >
> >---
> >You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
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>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

62. [dsp] Re: EVM query

From: "Paulus" <paulstra@xs4all.nl>
Date: Fri, 24 Nov 2000 10:55:24 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121303-2000.11.24-04.07.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello all,

On the EEprom there is an 5 volt pin (I think pin 40).
If you make this one switchable with an little switch , then you can switch
in or out the EEprom.
When the EVM is on, and you switch in the EEprom, just use the reset button
and the Flash will load the EVM56 (when the programs loaded in the EEprom
are ok though).
I have put now 2 EEproms in parallel (just soldered the other one above the
orignal one, exept the 5 volt and used an grounded solderiron), and can
switch the 5 volt to one of the two EEproms. Use an switch with 3 positions,
position 1 and 3 > 5 volt to the EEproms and position 2 is 5 volt OFF. It is
an ON-OFF-ON switch.
(in position 2 , no 5 volt to the EEproms, you can use the EVM56 the normal
way)
I put an small resistor of about 4k7 from each 5 volt pin of the EEproms to
ground with an capacitor of 100 nF in parallel. Felt an bit safer hi.
In one EEprom I hold the boot of G3plx software and the other the boot, with
an program like fsk1200, of N1OWU.

I do not think it is the right way to have all the adress lines etc
parallel, but it works.

Not the new Bios2 yet !
Did some other changes too in the past(like the Coherent Bpsk/amtor-pactor

change of Johan KC7WW) so do not know if this is causing an problem.....

With new Bios2 (with the Leonid on 68 Mhz processorspeed and 57k6 Hostport)
this still causes problems here, locking up the Evm56 and bringing on the
LEDS of the Heartbeat, Lock (DCD) and Down-led.
With the switchable 5 volt of the EEprom, you just turn the EVM56
powersupply off,
turn off the 5 volt to the EEprom and after that, switch the Evm56 on again,
and all is working again without the EEprom loading the EVM.
After putting the EEprom on the 5 volt again and the EVM on,(do not reset
the EVM56 at this point) you can put in new programs via the ONce port in
the EEprom, without pulling the EEprom out of his socket and putting it back
again.

By the way,
is the 68 MHz speed needed only for the 57k6 Hostport speed, or are the
programs like PSK (9k6 packet) and RXpsk400 demanding this speed ?

Loading the OLD (19k2 and 40 Mhz speed) bios2.cld, rxpsk400, flashboot (old
or new) in the EEprom together and flashing it, works ok (no Hangup) but the
heartbeat is ticking very irregular, so do not think this is ok.

Thats all from my side, hope to receive an psk400 signal soon....

Cheerio and 73
de Paul, PA0OCD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

63. [dsp] Re: EVM query

From: Eduardo Jacob <jtpjatae@bi.ehu.es>
Date: Fri, 24 Nov 2000 16:29:19 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121312-2000.11.24-09.41.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 02:25 24/11/00, you wrote:
>Hello, All!
>
>I had, with the help of the group, gotten my EVM to work running Rxpsk400
>etc. I flashed things to the EPROM and all was well.
>
>Then I tried to get fancy and sent some things to the EPROM so that with it
>in the socket the EVM won't boot...the green PLL lock light never comes on
>and I can't load anything via the serial ports.
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>If I take out the EPROM then all is well and both serial ports work fine...
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>EXCEPT THAT I DL.exe won't work...it does not see the EVM hooked up to the
>host port, even with bios2 loaded into the EVM. When I do 'dl -x' I get the
>message 'no response from the DSP CARD 4'. I have made sure that the
>correct dsp port and baud rate are specified as system variables, and have
>also tried putting them explicitly in the command line to make sure that dl
>knows where to send the data and at what speed. No go. All of this worked
>before I put junk in the EPROM. This is a pain as it means I must load
>using the ONCE port and then switch to the HOST port to use the program each

        What I do is to prepare the command line "dl ...." and press the
EVM reset button or power off and on the RI. There are a couple of seconds
in which you can press enter to start DL and everything works. One of the
things I don't like much (easy to correct) of the EVM RI is that it hides
the reset switch of the EVM which is easier to use than the OFF/ON approach.

        Eduardo/EA2BAJ

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

64. [dsp] Re: EVM query

From: "Paulus" <paulstra@xs4all.nl>
Date: Fri, 24 Nov 2000 21:09:57 +0100

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121332-2000.11.24-14.21.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Eduardo,

Yes I put an extra reset-button in the metal-housing of the Evm56 together
with the Load-Led.
And some extra things, like an 4 position rotary switch to switch the PC to
the ONce or Host-port, and reverse switch for the up/down controll.
Added also the leds for Heartbeat, DCD, Up, Down and PTT led.
So can controll most things from the outside, allthough there are only 4
screws to open up the housing of the EVM hi.

73
de Paul, PA0OCD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

65. [dsp] P3D soundcard decoder

From: "Nino Porcino" <porcino@sysonline.it>
Date: Fri, 24 Nov 2000 22:11:39 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121333-2000.11.24-15.26.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

I've released a soundcard-based decoder for the P3D (AO-40) satellite
telemetry.

Check out:

http://iz8bly.sysonline.it

Runs under Win9x.

73
- Nino Porcino (IZ8BLY)

P.S. spread the word

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

66. [dsp] Fw: [MFSK] P3D soundcard decoder

From: "Paulus" <paulstra@xs4all.nl>
Date: Fri, 24 Nov 2000 22:27:03 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121336-2000.11.24-15.38.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

----- Oorspronkelijk bericht -----
Van: "Nino Porcino" <porcino@sysonline.it>
Aan: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>; "Hellschreiber
List" <Hellschreiber@onelist.com>; "MT63 Mailing List" <mt63@onelist.com>;
<MFSK@egroups.com>; "PSK31 List" <psk31@bipt106.bi.ehu.es>;
<DigitalModes@egroups.com>
Verzonden: vrijdag 24 november 2000 22:11
Onderwerp: [MFSK] P3D soundcard decoder

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http://iz8bly.sysonline.it

Runs under Win9x.

73
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P.S. spread the word

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

67. [dsp] AO-40 demod for DSP1232/DSP2232

From: "MCGWIER ROBERT" <rwmcgwier@home.com>
Date: Fri, 24 Nov 2000 21:57:15 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121348-2000.11.24-21.09.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have uploaded the new AO-40 400 bps demod to

dsp/uploads on ftp.tapr.org

and

incoming on ftp.amsat.org

as AO40_DEM.ZIP

There is a readme file with little more than the name of
the two demods and what they are and a reminder to
use the qload command. Eric Cottrell and Charles Heisler
have used them successfully. Remember to change
P3T parameters to take 514 byte frames and to enable
CRC checking. Apparently it does more with the data
frames in the display once it believes the frame (CRC
checks).

Good Luck,
Bob N4HY

68. [dsp] Who operates PSK31?

From: "George Heron N2APB" <n2apb@erols.com>
Date: Fri, 24 Nov 2000 22:31:28 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121350-2000.11.24-21.44.59--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Quick, informal survey request for a neat PSK31 article in-progress ...

"Do you operate PSK31?" If so, could you please reply with some simple
info:
- callsign
- QTH (city/state/country)
- hardware used (commercial xcvr, PSK-20, Warbler, EVM56K, etc)
- software used (DigiPan, WinPSK, PSK31.exe, etc.)

Please reply direct (n2apb@amsat.org)

Thanks in advance! (Will share results soon.)

73, George N2APB
  n2apb@amsat.org
  PSK-80 "Warbler" at http://www.njqrp.org/warbler
  "Portable PSK" in Fall 2000 QRPp, and http://www.njqrp.org/portablepsk/

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

69. [dsp] Re: AO-40 demod for DSP1232/DSP2232

From: Ahmed Boudda <cn8gi@mtds.com>
Date: Sat, 25 Nov 2000 05:12:49 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-121351-2000.11.24-23.24.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi dear Bob ,
It was not possible for me to download the file from both amsat or tapr.

There is a problem. I will be very thankful for your help
best regards

MCGWIER ROBERT wrote:

> I have uploaded the new AO-40 400 bps demod to dsp/uploads on
> ftp.tapr.org and incoming on ftp.amsat.org as AO40_DEM.ZIP There is a
> readme file with little more than the name ofthe two demods and what
> they are and a reminder touse the qload command. Eric Cottrell and
> Charles Heislerhave used them successfully. Remember to changeP3T
> parameters to take 514 byte frames and to enableCRC checking.
> Apparently it does more with the dataframes in the display once it
> believes the frame (CRCchecks). Good Luck,Bob N4HY

--

Name : AHMED BOUDDA
ARRL Member int-# 10026301
DXCC :SAT # 251
Internet: cn8gi@mtds.com
Locator : IM63NX
qrv:UO22 , KO23 , KO25
qrv: HF all ham bands
QSL via QRZ site
73 qro

70. [dsp] Re: AO-40 demod for DSP1232/DSP2232

From: Paul Williamson <kb5mu@amsat.org>
Date: Sat, 25 Nov 2000 00:04:52 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121373-2000.11.25-02.16.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 05:12 AM 11/25/2000 +0000, Ahmed Boudda wrote:
>MCGWIER ROBERT wrote:
>>I have uploaded the new AO-40 400 bps demod to dsp/uploads on <ftp://ftp.tapr.org>ftp.tapr.org and
incoming on <ftp://ftp.amsat.org>ftp.amsat.org as AO40_DEM.ZIP

Available now as ftp://ftp.amsat.org/amsat/software/dsp2232/ao40_dem.zip or from the AO-40 telemetry
page at http://www.amsat.org/amsat/sats/ao40/ao40-tlm.html.

73 -Paul
kb5mu@amsat.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

71. [dsp] Fw: [MFSK] P3D soundcard decoder and P-3-D could be heard now !

From: "Paulus" <paulstra@xs4all.nl>
Date: Sat, 25 Nov 2000 12:22:38 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121380-2000.11.25-05.35.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

----- Oorspronkelijk bericht -----
Van: "Paulus" <paulstra@xs4all.nl>
Aan: <MFSK@egroups.com>
Verzonden: zaterdag 25 november 2000 12:20
Onderwerp: Re: [MFSK] P3D soundcard decoder and P-3-D could be heard now !

> Hello all,
>
> P-3-D is now to be heard on 145.898 USB in most of Europe (just arriving
in
> Norway and Sweden), Iceland, Africa, East part of USA, South America.
> At Arrival of sight, the signal strength on my Yagi was about s-6.
> After 10 minutes on my vertical the signal is about s-4.
> Good copy with Nino's SB decoder !!!
>
> In the Netherlands, according to my program, P-3-D beacon could be heard
> untill (lost of sight) 17.59 UTC with Azimuth at 262.

> Max elevation from here is about 16 degrees.
>
> Enjoy P-3-D decoding.
>
> Cheerio and 73
> de Paul, pa0ocd
>
>
>
>
> ------------------------- eGroups Sponsor -------------------------~-~>
> eLerts
> It's Easy. It's Fun. Best of All, it's Free!
> http://click.egroups.com/1/9699/2/_/_/_/975151254/
> ---_->
>
> To unsubscribe from this group, send an email to:
> MFSK-unsubscribe@egroups.com
>
>
>
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

72. [dsp] Nino's SB wking on P133 just fine!

From: "nils.schiffhauer" <nils.schiffhauer@metronet.de>
Date: Sat, 25 Nov 2000 13:02:03 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121383-2000.11.25-06.11.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,
as I write this, I am decoding AO-40 with Nino's soundblaster software
by notthing more than a scanner & an old-fashioned laptop P133/64MB. It
really wks fine, thanks lot! 73 Nils, DK8OK

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

73. [dsp] Re: P3D soundcard decoder

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Sat, 25 Nov 2000 09:15:20 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121411-2000.11.25-08.26.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

What's fun is running both the hardware/software decoder DSP-93 and your
sound card software at the same time.

:-)

Nice job Nino. Thank you for sharing your code.

73,

Mark N8MH

At 04:11 PM 11/24/2000, you wrote:
>Hello,
>
>I've released a soundcard-based decoder for the P3D (AO-40) satellite
>telemetry.
>
>Check out:
>
>http://iz8bly.sysonline.it
>
>Runs under Win9x.
>
>73
>- Nino Porcino (IZ8BLY)

>
>P.S. spread the word

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

74. [dsp] Re: [digitalradio] AO40 data using SB and Evm56

From: "Paulus" <paulstra@xs4all.nl>
Date: Sun, 26 Nov 2000 09:17:06 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121541-2000.11.26-02.28.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello all,

Yesterday an perfect copy on the SB P3-D decoder of Nino IZ8BLY, during
several hours on 1445.898 USB.
Signal strength varied on an 10 elem horizontal yagi from S-3 to S-6.
Also an reasonable copy was possible on my 2m/70cm vertical S-1 to S-3
The AFC tracked fine the dopller.

Also good copy on the Evm56 , using hyperterminal on 19k2. Program P3T gave
no Raw text yet, was counting the received bytes though (speed 19k2). AFC
done manually hi (not for hours)

Still NO success with the new 57k6 Bios2!
Still hangs up the Evm56, after flashing.
Did try several speeds (processor and baudrate) in the new Leonid, changed
the delay speeds in the new Flshboot accordingly, still hanging.

So I must be overlooking something, but what ??

What did work though:
Had to flash the Old: Bios2.cld (Leonid   on processor 80 Mhz and 19k2
speed), Psk1200.cld (or another old program) and Flshboot.cld, before I
could load via the Hostport the (Old) DL.exe rxpsk400.lod.
The program Rxpsk400 seems to be running fine for hours, allthough the
Heartbeat -Led is flashing an bit irregular.
Have 2 frequencies on which the DCD led comes up, but only 1 frequency will
decode.
Indeed the inputgain was put on 0 in the psk400.asm hi, put it on 5.

Today (sunday) according to the sat-program:

P3D:

In the Netherlands:

AOS: 10.30 UTC at 229 degrees
LOS: 18.20 UTC at   262 degrees
Max elevation: 18 degrees

So have fun in decoding some nice bulletins and so.

73 de Paul, PA0OCD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

75. [dsp] Windoze Soundblaster Library

From: "MCGWIER ROBERT" <rwmcgwier@home.com>
Date: Sun, 26 Nov 2000 13:26:59 -0500

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121598-2000.11.26-12.42.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I need a Freeware Windows 9X SoundBlaster
Library, source preferred, but I don't care so long
as I can read, write buffers and a clear API exists.
I have searched and nothing that really strikes
me as right for my application without too much
effort (learning or reprogramming). I am really
looking for something simple that will work with
100% SoundBlaster compatible cards. My
goodness but Linux is easier than this!

Thanks in advance.
Bob N4HY

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

76. [dsp] Soundcard Software P3D Telemetry Decoder

From: Thomas Sailer <sailer@ife.ee.ethz.ch>
Date: Mon, 27 Nov 2000 18:45:43 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121747-2000.11.27-11.57.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Here's my version of a soundcard software P3D demodulator.
It is open source, multiplatform (Linux, Sparc Solaris, Win32 with
DirectX),
uses MMX if available, and requires no tuning (the center frequency
can be anywhere between 1.2kHz and 2kHz).

Tom

http://www.ife.ee.ethz.ch/~sailer/ham/p3d/

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

77. [dsp] P3T Not Accepting Data

From: "Thomas M. Alldread" <tma@mail.island.net>
Date: Mon, 27 Nov 2000 11:18:10 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121759-2000.11.27-13.48.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Greetings All:

        I have been receiving the AO-40 data since last week on 145.8985 USB
+/- doppler shift running rxpsk400 on my EVM under my slightly modified
3 year old 19.2K bios2 and using Hyperterminal to display the data on my
PC. As shown by the captured samples below the HyperTerminal text data
seems to be quite clean.

        After many attempts I have not been able to get P3T to recognize the
data. I have tried different ports, updated the registry to 19200 baud
and re-installed P3T. My P3T setup screen shows ComPort 2 (which
supplies data to HyperTerminal OK), 19200, TCP/IP Boot Normal, Clock UTC
Offset 8 and my Default Directory as e:\56ver2r8\p3t. The Filter screen
shows 'Block Type All' and 'CRCC Filter checked' with the input window
blank. If I change CRCC to 'Ignore' I get a 'File error! - File altered
or incorrect length' error message. If I have HyperTerminal running on
port 2 and check 'Raw' under P3T text I get the appropriate 'port is in
use' error message. If I close HyperTerminal and try again I do not get
the 'port is in use' message suggesting P3T has successfully accessed
the Comm2 port. However with 'RAW' checked I do not get any data in the
'Raw Data' window and the 'Input Block, Byte and CRCC' counts remain
blank. The various 'Data' windows data fields are also blank. BTW my PC
is a Pentium 133 running under Windows 95b.

        I wonder if anyone here has had success with P3T and if so any
suggestions as to what I should try to get P3T to work for me would sure
be appreciated.

73 & Enjoy!
Tom, VA7TA

Sample data:

```
AMSAT OSCAR 40  **STATUS REPORT FRO
M DJ4ZC**  (2000-11-20)   1. AMSAT OSCAR 40 had a perfect launch on Nov.
16 and
was       injected into a nominal
orbit.                                  2. Tra
nsmission of telemetry from OSCAR 40 on 70cm was expected 3h after
launch. But w
e ran into a problem with the 70cm        Tx. Consequently the
spacecraft was sw
itched to use the 2m      middle beacon as downlink for telemetry. This
required
 a        "repeater program" in IHU-2 which was
uploaded.                 A  HI,
 THIS IS AMSAT OSCAR-40       2000-11-27  17:12:19  #0085
+---------------------
----------------------------------------+| ALON/ALAT=260/-19 moving to
270/0. D
 blocks are memory data.
|+-----------------------------------------------------
---------+o

3. After communication was establ
ished, the health of        OSCAR 40 was analysed and everything
testable at thi
s stage     except for the 70cm Tx was found to be nominal and
fine.        4. T
he attitude control system then was calibrated and torque   operations
were star
ted to take the attitude to 270/0.  This    reorientation should be
finished in
a few days. Then we are     ready for the first planned orbit change
(400N-mtr)
resulting   in 50000 km apogee altitude. The attitude will also allow
a...  A  H
I, THIS IS AMSAT OSCAR-40       2000-11-27  17:20:24  #0085
+-------------------
-----------------------------------------+| ALON/ALAT=260/-19 moving
to 270/0.
 D blocks are memory data.
|+-----------------------------------------------------
-----------+o
---------+| ALON/ALAT=260/-19 moving to 270/0. D blocks are memory data.
|+-----

  0@P@`pM  thorough study of the 70cm Tx problem with the
hi-gain ant.
  5. The two 2400 MHz transmitters were operated and are ok.      6.
Pictures fr
om the separation sequence are being downloaded   and will shortly be
available
on our website. There we will     also show the test-schedule for some
first ama
teur operations.  7. Steps after 1st orbit change: test the electric
propulsion
  system and then use it to further increase appogee altitude     using
the arcj
et before the big i-change.   --73s Karl--        A  HI, THIS IS AMSAT
OSCAR-40
      2000-11-27  17:24:53  #0085
+---------------------------------------------
-----------------+| ALON/ALAT=260/-19 moving to 270/0. D blocks are
memory data.
 |+--------------------

---
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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

78. [dsp] Re: P3T Not Accepting Data

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 27 Nov 2000 14:38:27 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121764-2000.11.27-13.58.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I think people using 19200 serial are having troubles. If you update to
57600, I think you'll find it works.

73,

Mark N8MH

At 11:18 AM 11/27/00 -0800, you wrote:
>Greetings All:
>
>   I have been receiving the AO-40 data since last week on 145.8985 USB
>+/- doppler shift running rxpsk400 on my EVM under my slightly modified
>3 year old 19.2K bios2 and using Hyperterminal to display the data on my
>PC. As shown by the captured samples below the HyperTerminal text data
>seems to be quite clean.
>
>   After many attempts I have not been able to get P3T to recognize the
>data. I have tried different ports, updated the registry to 19200 baud
>and re-installed P3T. My P3T setup screen shows ComPort 2 (which
>supplies data to HyperTerminal OK), 19200, TCP/IP Boot Normal, Clock UTC
>Offset 8 and my Default Directory as e:\56ver2r8\p3t. The Filter screen
>shows 'Block Type All' and 'CRCC Filter checked' with the input window
>blank. If I change CRCC to 'Ignore' I get a 'File error! - File altered
>or incorrect length' error message. If I have HyperTerminal running on
>port 2 and check 'Raw' under P3T text I get the appropriate 'port is in
>use' error message. If I close HyperTerminal and try again I do not get
>the 'port is in use' message suggesting P3T has successfully accessed
>the Comm2 port. However with 'RAW' checked I do not get any data in the
>'Raw Data' window and the 'Input Block, Byte and CRCC' counts remain
>blank. The various 'Data' windows data fields are also blank. BTW my PC
>is a Pentium 133 running under Windows 95b.
>
>   I wonder if anyone here has had success with P3T and if so any
>suggestions as to what I should try to get P3T to work for me would sure
>be appreciated.
>
>73 & Enjoy!
>Tom, VA7TA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

79. [dsp] Re: EVM

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 27 Nov 2000 20:57:20 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121800-2000.11.27-20.08.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 11:21 PM 11/23/00 , Roger Rehr W3SZ wrote:
>Hello to all...
>
>I got everything working...Johan KC7WW suggested I try CAREFULLY inserting
>the EPROM after powering up. We both understood what bad things COULD
>happen with this approach.
>
>I did this and re-flashed the eprom. It worked and all is well.
>
>Can't wait for the next P3D Pass!
>
>Thanks to all, and HAPPY THANKSgiving!

I'm glad it worked for you, but I cannot understand why it would be necessary.
What pre-existing code could be in the EEPROM that would prevent the
debugger from taking control of the EVM and downloading and running the flashing
program?

Doug Braun
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

80. [dsp] Re: EVM

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Mon, 27 Nov 2000 21:25:48 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121803-2000.11.27-20.37.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I think it was something that overwrote bios2 and thus prevented the EVM
from booting. Isn't this possible?

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

-----Original Message-----
From: bounce-dsp-3291@lists.tapr.org
[mailto:bounce-dsp-3291@lists.tapr.org]On Behalf Of Douglas Braun &
Nadia Papakonstantinou
Sent: Monday, November 27, 2000 8:57 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Re: EVM

At 11:21 PM 11/23/00 , Roger Rehr W3SZ wrote:
>Hello to all...
>
>I got everything working...Johan KC7WW suggested I try CAREFULLY inserting
>the EPROM after powering up. We both understood what bad things COULD
>happen with this approach.
>
>I did this and re-flashed the eprom. It worked and all is well.
>
>Can't wait for the next P3D Pass!
>
>Thanks to all, and HAPPY THANKSgiving!

I'm glad it worked for you, but I cannot understand why it would be
necessary.
What pre-existing code could be in the EEPROM that would prevent the
debugger from taking control of the EVM and downloading and running the
flashing
program?

Doug Braun
NA1DB

You are currently subscribed to dsp as: RREHR@EPIX.NET
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

81. [dsp] Re: EVM

From: Tomi Manninen OH2BNS <tpm@prkele.tky.hut.fi>
Date: Tue, 28 Nov 2000 13:48:29 +0200 (EET)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121850-2000.11.28-06.00.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Mon, 27 Nov 2000, Douglas Braun & Nadia Papakonstantinou wrote:

> >I got everything working...Johan KC7WW suggested I try CAREFULLY inserting
> >the EPROM after powering up. We both understood what bad things COULD

> >happen with this approach.
>
> I'm glad it worked for you, but I cannot understand why it would be necessary.
> What pre-existing code could be in the EEPROM that would prevent the
> debugger from taking control of the EVM and downloading and running the flashing
> program?

I seem to remember there was a small chance that if the EEPROM code
happened to touch a certain register, even the OnCE port would be
disabled. I don't remember the details of course...

--
Tomi Manninen Internet: oh2bns@sral.fi
OH2BNS AX.25: oh2bns@oh2rbi.fin.eu
KP20ME04 Amprnet: oh2bns@oh2rbi.ampr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

82. [dsp] Re: Soundcard Software P3D Telemetry Decoder

From: DL6KS@t-online.de (Helmut Vetter)
Date: Tue, 28 Nov 2000 15:32:29 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121871-2000.11.28-08.43.46--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Mni tnx for your software P3dtel~1.zip, Thomas.
After unzipping I got
GDK-1_3.DLL
GLIB-1_3.DLL
GMODULE-.DLL
GNUINTL.DLL
GOBJECT-.DLL
GTK-1_3.DLL
P3DTELEM.EXE
PTHREAD.DLL

Starting the exe.file I got the error-alert GTK-1.3.DLL not found.
Do I have to rename the GTK-1_3.DLL to GTK-1.3.DLL??
The same after copying all the DLLs to the WINDOWS and/or WINDOWS/SYSTEM
directory...
I appreciate your help and tnx in advance!

73 de Helmut; Loc JO30LO Rheinbach; G23

Thomas Sailer wrote:
> Here's my version of a soundcard software P3D demodulator.
> It is open source, multiplatform (Linux, Sparc Solaris, Win32 with
> DirectX),
> uses MMX if available, and requires no tuning (the center frequency
> can be anywhere between 1.2kHz and 2kHz).
>
> Tom
>
> http://www.ife.ee.ethz.ch/~sailer/ham/p3d/
>
> ---
> You are currently subscribed to dsp as: dl6ks@t-online.de
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

83. [dsp] Re: EVM

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Tue, 28 Nov 2000 10:04:27 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121873-2000.11.28-09.15.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I flipped through my 56002 data books, and I couldn't find any mention
of a way to disable the OnCE port in software. Maybe there is an

undocumented way to do it, but I think you would have to be very unlucky
to have it happen by accident...

Doug Braun

At 06:48 AM 11/28/00 , you wrote:

>I seem to remember there was a small chance that if the EEPROM code
>happened to touch a certain register, even the OnCE port would be
>disabled. I don't remember the details of course...
>
>--
>Tomi Manninen   Internet: oh2bns@sral.fi
>OH2BNS   AX.25:   oh2bns@oh2rbi.fin.eu
>KP20ME04   Amprnet: oh2bns@oh2rbi.ampr.org

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84. [dsp] Re: EVM

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Tue, 28 Nov 2000 10:18:55 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121877-2000.11.28-09.30.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Guess I'm unlucky :-)

I think I'm talking about the right thing here...if not, ignore me..heh.

Here is what I saw--there was no way for me to "talk" to the EVM through
the OnCe port. The debugger could not even see the EVM, let alone try to
program the EEPROM. It had been working, and I was messing with
flashing/upgrading the unit to 57600. After one particular flash, the
debugger no longer saw the EVM. Yes, I was worried...

The only thing I could think of was that somehow the EEPROM was
confused. I pulled the EEPROM, and the debugger saw the EVM just fine. I
got gusty, and plugged it in while it was running (having read about
similar tricks with motherboards/BIOS). I flashed it, and it's been fine
ever since.

At 10:04 AM 11/28/00 -0500, you wrote:
>I flipped through my 56002 data books, and I couldn't find any mention
>of a way to disable the OnCE port in software. Maybe there is an
>undocumented way to do it, but I think you would have to be very unlucky
>to have it happen by accident...
>
>Doug Braun
>
>At 06:48 AM 11/28/00 , you wrote:
>
> >I seem to remember there was a small chance that if the EEPROM code
> >happened to touch a certain register, even the OnCE port would be
> >disabled. I don't remember the details of course...
> >
> >--
> >Tomi Manninen   Internet: oh2bns@sral.fi
> >OH2BNS   AX.25:   oh2bns@oh2rbi.fin.eu
> >KP20ME04   Amprnet: oh2bns@oh2rbi.ampr.org
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

85. [dsp] Re: Soundcard Software P3D Telemetry Decoder

From: Thomas Sailer <sailer@ife.ee.ethz.ch>
Date: Tue, 28 Nov 2000 17:20:44 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121878-2000.11.28-10.31.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Helmut Vetter wrote:
>
> Mni tnx for your software P3dtel~1.zip, Thomas.
> After unzipping I got
> GDK-1_3.DLL
> GLIB-1_3.DLL
> GMODULE-.DLL
> GNUINTL.DLL
> GOBJECT-.DLL
> GTK-1_3.DLL
> P3DTELEM.EXE
> PTHREAD.DLL
>
> Starting the exe.file I got the error-alert GTK-1.3.DLL not found.
> Do I have to rename the GTK-1_3.DLL to GTK-1.3.DLL??
> The same after copying all the DLLs to the WINDOWS and/or WINDOWS/SYSTEM
> directory...

The problem is that the file names got mangled apparently - they should
look like below:

```
Archive:  p3dtelem-win32.zip
  Length     Date   Time    Name
 --------    ----   ----    ----
   428007  09-21-00 13:19   gdk-1.3.dll
   299107  09-21-00 13:19   glib-1.3.dll
    16638  09-21-00 13:19   gmodule-1.3.dll
    28405  09-21-00 13:19   gnu-intl.dll
    95648  09-21-00 13:19   gobject-1.3.dll
    22962  09-21-00 13:19   gthread-1.3.dll
  1833402  09-21-00 13:19   gtk-1.3.dll
   268719  11-27-00 17:17   p3dtelem.exe
    36924  09-21-00 13:19   pthread.dll
 --------                   -------
  3029812                   9 files
```

Did you use a DOS Zip to unpack the archive? If so can you try
a Win32 version of Zip (or WinZip) to unpack the files? (or
if all else fails to manually rename the files to the name above)

There's no need to copy any file to \windows or \windows\system,
it's sufficient to put all files into an arbitrary directory.

Tom

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86. [dsp] DSP56002EVM Software and Documentation

From: Douglas Braun NA1DB <dougnad@bellatlantic.net>
Date: Tue, 28 Nov 2000 23:53:44 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-122007-2000.11.28-23.05.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

A couple of people have asked me where to find Motorola's documentation
and software for the 56002 chip and the EVM. Here's some pointers:

The Red books are on Motorola's web site, in .pdf files:
http://www.motorola.com/SPS/DSP/documentation/DSP56000.html

The ones you want are:
http://ebus.motorola.com/brdata/PDFDB/DIGITAL_SIGNAL_PROCESSORS/DSP_DISCONTINUANCES/DSP56000UM.pdf

and

http://ebus.motorola.com/brdata/PDFDB/DIGITAL_SIGNAL_PROCESSORS/24-BIT_DATA_PATH/DSP56000_FAMILY/DSP5600
2UM.pdf

There is an updated release of the assembler, debugger, etc. at:
http://www.mot.com/pub/SPS/DSP/helpline/evm/evm28.exe

For the brave, there is a huge (50MB) package that has an even newer
version of the assembler, along with a huge C compiler and linker
system: http://www1.motorola-dsp.com/software/software.taf?type=releases
This also has versions of the tools for Unix.

Somewhere, there is a Windows version of the debugger program. But I
prefer to use the DOS version (in the above dvm28.exe file), since it
loads stuff faster.

Good Luck,

Doug
NA1DB

At 11:21 PM 11/28/00 , you wrote:
 >Thanks Doug for the help and direction. I do have the debugger problem that
 >came with the evm, but I do not have the 2 fat red books. If you have a
 >source for them, please let me know. Thanks again. It amazes me that with
 >all the digital satellites we have and the interest in them, there is no
 >one producing off-the-shelf equipment to transceive with them.
 >
 >regards,
 >
 >David Jordan, AA4KN
 >----- Original Message -----
 >From: "Douglas Braun & Nadia Papakonstantinou" <dougnad@bellatlantic.net>
 >To: "aa4kn" <aa4kn@email.msn.com>
 >Sent: Monday, November 27, 2000 8:53 PM
 >Subject: Re: DSP56002EVM Software
 >
 >
 > > Go to www.dougbraun.com. Get the file evmco131.zip. This has all the
 >code you need.
 > > As for instructions, that is a bit trickier. :-(You have to read
 >several
 > > pieces of documentation, knowing what to pay attention to and what to
 >disregard.
 > >
 > > I think the TAPR site has one important document: The original
 >"AlefNull"
 > > documentation to the "Leonid" BIOS and a couple of modem programs.
 > >
 > > Step one is to learn how to assemble EVM programs and how to use the
 > > debugger program that came with the EVM. Hopefully you got the
 >documentation
 > > with the EVM itself. Also, I hope you have the two fat red books that
 > > describe the 56002 instruction set and architecture.
 > >
 > > You are not the first person to ask this question in the last couple of
 >weeks.
 > > Probably I should at least put together a bibliography for EVM users...
 > >
 > > Good Luck,
 > >
 > > Doug Braun
 > >
 > > At 12:49 AM 11/26/00 , aa4kn wrote:
 > > >Doug,
 > > >   I have obtained and assembled an EVM kit from TAPR. I understand
 >that you have written software for demodulating some amateur satellites for
 >this unit. How can I get this software and do you have any suggestions on
 >how to get started using this unit? I would appreciate any input you have.
 > > >
 > > >regards,
 > > >
 > > >David Jordan AA4KN
 > >

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December 2000

Original source file: dsp.0012
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0012

1. [dsp] Test

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 04 Dec 2000 13:34:30 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-122809-2000.12.04-12.46.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

Is this (or any) AMSAT list alive?

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: Test

From: Bill Beech <nj7p@nj7p.org>
Date: Mon, 04 Dec 2000 11:59:49 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-122813-2000.12.04-13.10.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

You are the first I've seen since tuesday last week at p53 AM

Bill, NJ7P

Douglas Braun & Nadia Papakonstantinou wrote:

> Hello,
>
> Is this (or any) AMSAT list alive?
>
> Doug
> NA1DB
>
> ---
> You are currently subscribed to dsp as: nj7p@nj7p.org
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: Test

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Mon, 04 Dec 2000 14:21:02 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-122816-2000.12.04-13.32.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

If you are not getting any AMSAT-BB messages, you aren't subscribed! The
volume there (about 50% are my silly posts :) has been high.

Not much heard here, though.

Have you dusted off the array and put it up yet, Doug??

73,

Mark N8MH

At 01:34 PM 12/4/00 -0500, you wrote:
>Hello,
>
>Is this (or any) AMSAT list alive?
>
>Doug
>NA1DB

>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] AO-40 telemetry simulator program

From: "Moe Wheatley" <ae4jy@mindspring.com>
Date: Tue, 5 Dec 2000 10:39:52 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-122953-2000.12.05-09.55.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I kludged together an AO-40 telemetry signal generator into an old Windows
soundcard program i wrote several years ago called WSCGen.exe.

http://www.qsl.net/ae4jy/projects.htm

This may be of some use to "see" what the signal looks and sounds like and
maybe play with some of the various decoder programs around without having
to setup a radio and wait for the next pass.

The down side is you may need 2 PC's if your soundcard doesn't duplex if you
want to decode the signal.

The program has no docs but should be fairly intuitive to use. It creates
some canned text messages and the telemetry data is just random numbers.
The VC++ source code is there if someone wants to modify anything. The
Windoze code is ugly but the encoder class is straight forward.

Couple of Questions:
1. Is the data inverted from what the Amsat telemetry spec says?

2. Is there any further info on the data filter besides a "gentle" low-pass
with 560Hz 3dB cutoff? I used a 3 pole Butterworth but don't know if that
is too "gentle" ;>)

73's
Moe, AE4JY

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: EVM-RI fsk1200 works.

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 11 Dec 2000 13:00:28 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@lists.tapr.org
Message-ID: <LYR3532-124083-2000.12.11-12.23.46--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

For DL to work, you have to load bios2, the modem of your choice,
and flshboot (in that order) into the EVM's memory with the debugger.
Then you do a 'G' command to run the actual flashing routine. Read
all the comments at the top of flshboot.asm for more info.

But the way it is written, the 400BPS PSK modem program will NOT
work with the flash. It sticks things in memory locations that
the flshboot program does not save and load to and from the EEPROM.
You have to fiddle with a couple of the "org" statements to pack
the data structures a little more closely towards the bottom of memory.
Then you have to adjust a couple parameters in flshboot.asm to set
the boundaries of the memory regions to be flashed.

I will put the version that I use on my Web site today.

Doug
NA1DB

At 12:04 PM 12/11/00 , Vince Fiscus, KB7ADL wrote:
>Hi Mark, Doug,
>Just loaded and tried receiving afsk 1200 packet with pmp and everything works.

>I'm going to try some ao-40 telemetry next.
>
>To use your DL programs Doug, do I need to load bios2 and flashboot programs first?
>
>Mark, for digital on the 790, did you make the anti-muting mode when using the mic up/down lines?
>
>
>73 de KB7ADL
>

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6. [dsp] Re: EVM-RI fsk1200 works.

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 11 Dec 2000 14:01:52 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@lists.tapr.org
Message-ID: <LYR3532-124086-2000.12.11-13.14.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Yes, you are right. When I originally did the calculation to
determine the number of PX and Y memory words to save, I did it wrong,
and made them too big for flshboot to save. After I did the
math correctly, I found that it fits, but just barely.

I decided to change flshboot a bit to make it more intuitive to
specify the memory regions to save: Instead of specifying
the number of PX and Y words, you simply specify top memory
addresses used by the program you are flashing.

Doug
NA1DB

At 01:08 PM 12/11/00 , Mark L. Hammond wrote:
>Doh! Why does mine seem to work? I don't recall fixing anything Doug---unless I have a version you
worked on, or Alan "fixed"? I don't recall...
>
>
>
>At 01:00 PM 12/11/00 -0500, you wrote:
>>For DL to work, you have to load bios2, the modem of your choice,
>>and flshboot (in that order) into the EVM's memory with the debugger.
>>Then you do a 'G' command to run the actual flashing routine. Read
>>all the comments at the top of flshboot.asm for more info.
>>
>>But the way it is written, the 400BPS PSK modem program will NOT
>>work with the flash. It sticks things in memory locations that
>>the flshboot program does not save and load to and from the EEPROM.
>>You have to fiddle with a couple of the "org" statements to pack
>>the data structures a little more closely towards the bottom of memory.
>>Then you have to adjust a couple parameters in flshboot.asm to set
>>the boundaries of the memory regions to be flashed.
>>
>>I will put the version that I use on my Web site today.
>>
>>Doug
>>NA1DB
>>
>>At 12:04 PM 12/11/00 , Vince Fiscus, KB7ADL wrote:
>> >Hi Mark, Doug,
>> >Just loaded and tried receiving afsk 1200 packet with pmp and everything works.
>> >I'm going to try some ao-40 telemetry next.
>> >
>> >To use your DL programs Doug, do I need to load bios2 and flashboot programs first?
>> >
>> >Mark, for digital on the 790, did you make the anti-muting mode when using the mic up/down lines?
>> >
>> >
>> >73 de KB7ADL
>> >
>
>
>
>Mark L. Hammond [N8MH]

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7. [dsp] Mobile Radio Multipath

From: Charles Brain <chbrain@dircon.co.uk>
Date: Tue, 12 Dec 2000 10:13:32 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124202-2000.12.12-04.28.09--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

Does anyone know what length of multipath delay is seen in a mobile
radio channel in an urban environment.

- Charles G4GUO

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: Mobile Radio Multipath

From: "stephane@rochebrune.org" <stephane@rochebrune.org>
Date: Tue, 12 Dec 2000 18:16:41 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124229-2000.12.12-11.30.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Charles,

>Does anyone know what length of multipath delay is seen in a mobile
>radio channel in an urban environment.

The multipath delay may depend of frequency (reflexions change with frequency)

I remember a good test I've done some years before (theory is good,
experiment in real world is better) : drive a car _moderatly_ fast in a
very _narrow_ street, with a test receiver inside the car feeded by a
quarter wave antenna... You could be surprised, very surprised (results may
depend of your fec depth, modulation type, and many other factor you know
better than me...)

I can't help you more, maybe some guru here...

What new about your AMBEx000 experiments ?

Sorry, my english is, as always, quite bad ;-)

73 de F1USA, Stephane (Oleron island - France)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: Mobile Radio Multipath

From: Charles Brain <chbrain@dircon.co.uk>
Date: Tue, 12 Dec 2000 17:47:24 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124234-2000.12.12-12.06.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Stephane,

What I am trying to do is decide the number of feedforward and feedback taps
I need in the adaptive equalizer for the modem I am designing. It uses PI/4-Offset
DQPSK and a K=5 1/2 convolutional code. The equalizer is based on a modified
(for fixed point) Root Kalman update algorithm. The TI app note I have suggests
3 feedforward taps and one feedback tap are all that should be required
(for an IS54 implementation).

The whole thing uses 5khz channels and the will operate in the 6m band. I am going to be using
a modified 6m transceiver kit for the RF side. I did manage to have a 2m QSO over a 70km path
with the digital voice using an SSB radio the AMBE board and my trusty Motorola 56002 EVM.

The modem works but I have not added the equalizer yet although I do have a C implementation of
it incorporated in a Linux 2k4 HF modem so I am hopeful!

As you probably realized I will be using it for digital voice / data.

So now you know the latest!

Don't worry about the English it is a lot better than my French.

- Charles

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10. [dsp] RE: 400B psk modem

From: "Roger Rehr W3SZ" <rrehr@epix.net>
Date: Wed, 13 Dec 2000 00:22:03 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124323-2000.12.12-23.34.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello, Doug!

I have been using the EVM 400B PSK modem, as you know. I have not been able
to get it to load via flshboot, but have to have the EVM power up with the
PSK1200 in EPROM, and then load the 400B modem with DL.

I had assumed that this was a quirk of the setup here. Some emails
yesterday suggested to me that this may be a problem others have noted, and
it looked to me like you might have another version of flshboot that solved
this 'problem'. Is this correct?

Thanks!

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.epix.net/~rrehr/w3sz.htm

-----Original Message-----
From: bounce-dsp-3291@lists.tapr.org
[mailto:bounce-dsp-3291@lists.tapr.org]On Behalf Of Douglas Braun &
Nadia Papakonstantinou
Sent: Monday, December 11, 2000 2:02 PM
To: TAPR DSP Special Interest Group
Cc: dsp@lists.tapr.org
Subject: [dsp] Re: EVM-RI fsk1200 works.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: Mobile Radio Multipath

From: Thomas Sailer <sailer@ife.ee.ethz.ch>
Date: Wed, 13 Dec 2000 11:34:11 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124352-2000.12.13-04.46.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Charles Brain wrote:

> Does anyone know what length of multipath delay is seen in a mobile
> radio channel in an urban environment.

According to COST207 (which became the ETSI channel model for GSM AFAIK):

Typical Urban:

Delay spread sigma = 1us, leading to a -30dB channel length of 7us.

Bad Urban:

First ray at t=0us, sigma=1us, second ray at t=5us, sigma=1us, attenuated
by 3dB, leading to a channel length of about 11us.

Hilly Terrain:

First ray at t=0us, sigma=0.28us, second ray at t=15us, sigma=1us,
attenuated by 10dB, leading to a channel length of 20us.

It's questionable if you can directly use these values for 6m though.
They should be valid for 900MHz and up.

Tom

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: Mobile Radio Multipath

From: Charles Brain <chbrain@dircon.co.uk>
Date: Wed, 13 Dec 2000 11:22:17 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124354-2000.12.13-05.36.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thomas Sailer wrote:
>
> It's questionable if you can directly use these values for 6m though.
> They should be valid for 900MHz and up.
>
> Tom
>

Thanks Tom,

At the moment my symbol period is 250us long, although the modem will operate
at twice that rate in full duplex, before the traceback routine in the Viterbi
decoder packs up. Oh for the 563XX series with its Viterbi shift left function.

I am only using 6m as the hardware is cheap and the guy doing the RF work does
not have any test equipment that goes above about 200 Mhz. But it is a start.
It is unlikely the radios will ever be operated mobile but you never know.

- Charles

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Re: Mobile Radio Multipath

From: Charles Brain <chbrain@dircon.co.uk>
Date: Wed, 13 Dec 2000 12:03:47 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124358-2000.12.13-06.16.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> It is unlikely the radios will ever be operated mobile but you never know.
>

As an afterthought I think my main problem maybe aircraft induced multipath.
The delays on that should be fairly simple to calculate.

The voice is being interleaved over a 100ms period so that should help with
selective fading, only time will tell. The symbol periods are so long that
the equalizer maybe unnecessary.

 - Charles

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] RE: 400B psk modem

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Wed, 13 Dec 2000 07:24:12 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124360-2000.12.13-06.35.57--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

CORRECTION....

I do NOT have 400PSK modem loaded in the "flash" so it loads upon EVM being
powered up. Rather, I load it with the download program each time before
use. I have the 9600FSK modem as the default "flash" modem.

Apparently *I* misunderstood Doug's comments about this issue. Sorry for
adding to the confusion.

Once again, showing how enthusiasm does not usually win over knowledge ;-)

At 12:22 AM 12/13/2000, you wrote:
>Hello, Doug!
>
>I have been using the EVM 400B PSK modem, as you know. I have not been able
>to get it to load via flshboot, but have to have the EVM power up with the
>PSK1200 in EPROM, and then load the 400B modem with DL.
>
>I had assumed that this was a quirk of the setup here. Some emails
>yesterday suggested to me that this may be a problem others have noted, and
>it looked to me like you might have another version of flshboot that solved
>this 'problem'. Is this correct?
>
>Thanks!
>
>73,
>
>Roger Rehr
>W3SZ ex AA3QK, WA3JYM FN20ah
>2 Merrymount Road
>Reading, PA 19609-1718
>http://www.epix.net/~rrehr/w3sz.htm
>
>-----Original Message-----
>From: bounce-dsp-3291@lists.tapr.org
>[mailto:bounce-dsp-3291@lists.tapr.org]On Behalf Of Douglas Braun &
>Nadia Papakonstantinou
>Sent: Monday, December 11, 2000 2:02 PM
>To: TAPR DSP Special Interest Group
>Cc: dsp@lists.tapr.org
>Subject: [dsp] Re: EVM-RI fsk1200 works.
>
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] Re: Mobile Radio Multipath

From: "stephane@rochebrune.org" <stephane@rochebrune.org>
Date: Wed, 13 Dec 2000 11:22:26 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124363-2000.12.13-07.30.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Charles !

>What I am trying to do is decide the number of feedforward and feedback taps
>I need in the adaptive equalizer for the modem I am designing. It uses
>PI/4-Offset
>DQPSK and a K=5 1/2 convolutional code. The equalizer is based on a modified
>(for fixed point) Root Kalman update algorithm. The TI app note I have
>suggests
>3 feedforward taps and one feedback tap are all that should be required
>(for an IS54 implementation).

You may follow this advice : I often notice we can trust design decisions
made in big projects like ISxx, tetra, tetrapol, apco25 and others... The

involved engineers done a lots of simulations, real tests, with very good
and expensive instruments...

In an other way, 6 meter is a low frequency vs IS54 frequency... Is there a
guru here to tell us if frequency is a major parameter in multipath delay
(reflexions change with used freq) ?

>The whole thing uses 5khz channels and the will operate in the 6m band. I
>am going to be using a modified 6m transceiver kit for the RF side. I did
>manage to have a 2m QSO over a 70km path with the digital voice using an
>SSB radio the AMBE board and my trusty Motorola 56002 EVM.
>
>The modem works but I have not added the equalizer yet although I do have
>a C implementation of it incorporated in a Linux 2k4 HF modem so I am hopeful!

Yes, you _must_ use a _very good_ equalizer with PI/4 DQPSK, and,
obviously, a linear transceiver. Other drawback is deafness between two
side by side transceiver operating at near frequencies (not really a
problem in ham traffic).

However, the spectrum is really narrow... PI/4 DQPSK is an up to date
modulation type (vs the older but _very strong_ GMSK modulation type).

The equalizer if _the_ hard part... I remember there is a CML PI/4 DQPSK
modem... Is the equalizer included in the chip ? (I guess no). May be there
are some advices in the data sheet ?

By the way, don't forget my "real world" test in a narrow street (one floor
building is enough), in UHF band, it's a _terrific_ test :-()

>As you probably realized I will be using it for digital voice / data.
>
>So now you know the latest!

It is always a pleasure to hear about your work !

73 de F1USA, Stephane (Oleron island - France)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] Re: Mobile Radio Multipath

From: Charles Brain <chbrain@dircon.co.uk>
Date: Wed, 13 Dec 2000 13:59:54 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124376-2000.12.13-08.13.43--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> obviously, a linear transceiver. Other drawback is deafness between two

Yes that is something that may produce a problem, i.e spreading of the
signal due to non linearities in the PA.

> The equalizer if _the_ hard part... I remember there is a CML PI/4 DQPSK
> modem... Is the equalizer included in the chip ? (I guess no). May be there
> are some advices in the data sheet ?

If you are talking about the chip I think you are (FX980), no it does not. It is a baseband
front end with the requisite filtering for TETRA and a number of A/D and D/A channels
for the microphone input, IQ input/output and AGC control. The filters can be reprogrammed for
other uses. The chip is also quite expensive (in small quantities) and is in very short supply,
or it was when I asked.

The equalizer code I have, I developed from a paper written in 1982 it seems to work quite well
there are issues about it's stability in a fixed point implementation because of round off errors in the

recursive part of the algorithm. There is an upper triangular matrix that has to be reset every 200
iterations for the thing to remain stable, but that only has a small affect on the adaption speed.

> It is always a pleasure to hear about your work !

Thanks, it just takes me a very long time to get things to work!

- Charles

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] Re: Mobile Radio Multipath

From: "stephane@rochebrune.org" <stephane@rochebrune.org>
Date: Wed, 13 Dec 2000 15:06:21 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124396-2000.12.13-10.52.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Charles & Tom,

>According to COST207 (which became the ETSI channel model for GSM AFAIK):
>.../...
>It's questionable if you can directly use these values for 6m though.
>They should be valid for 900MHz and up.

May be an indirect way :

Is this COST207 used for TETRA ? (mainly used in 400 MHz band)
or...
Is this COST207 used for GSM1800 ? (used in 1800 MHz (WORLD) & 1900 MHZ
(US) band)
or...
What is the ETSI channel model used for TETRA ?
etc...

May be http://www.etsi.org is the right place to get the answer ?

Then you may compare with GSM 900 MHz Tom's data...

73 de F1USA, Stéphane (Oleron island - France)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] RE: 400B psk modem

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Wed, 13 Dec 2000 13:58:15 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: rrehr@epix.net
Message-ID: <LYR3532-124419-2000.12.13-13.12.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

You have to adjust the memory size parameters in flshboot.asm,
to match the memory that is actually used by the PSK modem
program.

I THINK the correct values are:

WORDS_PX_EXT equ $240
WORDS_P_EXT   equ $1140

I say "I think" because I hacked the program up a bit and my sizes
are no longer the same as the "official" version. Give
the above values a try. Don't forget to reassemble flshboot.asm!
If it still doesn't work, try checking the assembler listing file
for the actual memory ranges used by the PSK modem, and re-read
the comments in flshboot.asm to make sure that you are doing
the math correctly. If still no luck, ask me again.

Doug
NA1DB

At 12:22 AM 12/13/00 , you wrote:
>Hello, Doug!
>
>I have been using the EVM 400B PSK modem, as you know. I have not been able
>to get it to load via flshboot, but have to have the EVM power up with the
>PSK1200 in EPROM, and then load the 400B modem with DL.
>
>I had assumed that this was a quirk of the setup here. Some emails
>yesterday suggested to me that this may be a problem others have noted, and
>it looked to me like you might have another version of flshboot that solved
>this 'problem'. Is this correct?
>

>Thanks!
>
>73,
>
>Roger Rehr
>W3SZ ex AA3QK, WA3JYM FN20ah
>2 Merrymount Road
>Reading, PA 19609-1718
>http://www.epix.net/~rrehr/w3sz.htm
>
>-----Original Message-----
>From: bounce-dsp-3291@lists.tapr.org
>[mailto:bounce-dsp-3291@lists.tapr.org]On Behalf Of Douglas Braun &
>Nadia Papakonstantinou
>Sent: Monday, December 11, 2000 2:02 PM
>To: TAPR DSP Special Interest Group
>Cc: dsp@lists.tapr.org
>Subject: [dsp] Re: EVM-RI fsk1200 works.
>
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: EVM-RI fsk1200 works.

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Wed, 13 Dec 2000 18:07:01 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: "Mark L. Hammond" <hammond@surrealnet.net>, dsp@lists.tapr.org
Message-ID: <LYR3532-124438-2000.12.13-17.19.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

My "pop quiz" is actually pretty hard. If you knew the answer,
you would be in the elite league of EVM Wizards.

The answer is this:

The 56002 chip on the EVM is hard-wired to boot up in "Bootstrap from EPROM"
mode. This is described in section 3.4.2 of the 56002 User's Manual
(the thinner Red Book).

In this mode, the 56002 will copy a small amount of data from the EEPROM's
address space into low P memory, and start executing. During the copy,
it assembles 3 EEPROM bytes from 3 consecutive memory locations into one
24-bit memory word.

The code initially loaded from the EEPROM in turn loads a bigger routine,
which then fills the internal and external P, X, and Y memory with
data. These bootstrap routines are found in flshboot.asm. They
don't execute when you run flshboot, they simply get copied to the EEPROM.

Now, given these facts, you can see what happens if no EEPROM
chip is inserted into the EVM: The 56002 will copy a bunch of random
garbage bytes from the EEPROM address space, and start executing them.
Thus, it will execute random garbage until the OnCE debugger interface
seizes control of the chip. (Note that there is a second microprocessor
on the EVM, a 68HC705, whose only job is to listen to the OnCE serial port
and manipulate the 54002's OnCE interface signals in response to debugger
commands.)

Doug
NA1DB

At 01:15 PM 12/12/00 , Vince Fiscus, KB7ADL wrote:

>I can't pass the pop quiz yet. I really should just quit asking questions and I should continue
reading everything I have. I've downloaded alot of the DSP card-4 information and I'm learning about
alot of the early dsp work that's been done.

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20. [dsp] Re: Mobile Radio Multipath

From: "stephane@rochebrune.org" <stephane@rochebrune.org>
Date: Wed, 13 Dec 2000 17:51:54 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124521-2000.12.14-02.37.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>Thanks, it just takes me a very long time to get things to work!

In France (may be in others countries too), we use to say

"time does not respect what is done without it"

(it always take time to make well behaved things)

73 de F1USA, Stéphane (Oleron Island)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] Re: EVM-RI fsk1200 works.

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Thu, 14 Dec 2000 12:12:07 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@lists.tapr.org
Message-ID: <LYR3532-124583-2000.12.14-11.24.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Here is an important tip:

To write a new program, start with a well-written existing one,
and modify it.

Most programs will have a lot of very similar code for setting up
the hardware, doing the main processing loop, implementing
filters, arranging things i memory, etc. Avoid re-inventing these things.
Steal as much (good) code as possible.
For example, setting up the codec is simply a matter of calling
a couple of Leonid routines.

Code is "good" if it works, and you can understand what it does.

Many programs do a lot of parallel loads and other coding tricks that
speed them up a bit, but make them harder to understand and modify.
If a program runs "fast enough", there is no advantage to speeding
it up at the cost of legibility and robustness.

If I had to give one of my programs as an example, it would be apt.asm.
Some of the math may be sub-optimum, but it works, and it
is easy to understand.

Doug

At 11:55 AM 12/14/00 , you wrote:
>Thanks Doug, I'm in the education process now. I've got alot of ideas for software for the evm, I just need to learn the hardware and how to write good code for it. Programming the evm is much more complicated than writing assembly code for your favorite micro-processor. The codec needs to be 'programmed' too. I'm not planning to re-invent the wheel, but if I can make the wheel more 'round', it will help the evm users group.
>73 de KB7ADL

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

22. [dsp] EVM System for sale

From: AG8B@aol.com
Date: Sat, 16 Dec 2000 16:23:07 EST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124941-2000.12.16-15.37.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have an EVM and the radio interface based on the KC7WW design. This
system is very similiar to the TAPR system. The system is housed in an

attractive metal enclosure, has LEDs on the front panel and has 9-pin D
connectors for the Once port and serial port.   Price: $225. Dave AG8B,
517-835-1360.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

23. [dsp] Re: EVM System for sale

From: "Brian D Heaton" <bdheaton@c4i2.com>
Date: Sat, 16 Dec 2000 22:03:58 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-124949-2000.12.16-16.17.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Dave,

    I'll take it for price as listed. How would you prefer to receive
payment???

              THX/BDH

----- Original Message -----
From: <AG8B@aol.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Saturday, December 16, 2000 9:23 PM
Subject: [dsp] EVM System for sale

> I have an EVM and the radio interface based on the KC7WW design.   This
> system is very similiar to the TAPR system.   The system is housed in an
> attractive metal enclosure, has LEDs on the front panel and has 9-pin D
> connectors for the Once port and serial port.   Price: $225. Dave AG8B,
> 517-835-1360.
>
> ---
> You are currently subscribed to dsp as: bdheaton@c4i2.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

24. [dsp] More EVM info on my Web site

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Sun, 17 Dec 2000 02:37:38 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-125006-2000.12.17-01.51.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

I added some information and links to my Web site on where to find EVM
documentation and development tools. If you're curious,
check out www.dougbraun.com or members.bellatlantic.net/~dougnad

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

25. [dsp] Re: EVM System for sale

From: "Brian D Heaton" <bdheaton@c4i2.com>
Date: Sun, 17 Dec 2000 11:54:12 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-125012-2000.12.17-06.37.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Oops.. should have been a private reply.. Apologies to the list..

      BDH

```
----- Original Message -----
From: "Brian D Heaton" <bdheaton@c4i2.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Saturday, December 16, 2000 10:03 PM
Subject: [dsp] Re: EVM System for sale


> Dave,
>
>     I'll take it for price as listed.  How would you prefer to receive
> payment???
>
>               THX/BDH
>
>
> ----- Original Message -----
> From: <AG8B@aol.com>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Saturday, December 16, 2000 9:23 PM
> Subject: [dsp] EVM System for sale
>
>
> > I have an EVM and the radio interface based on the KC7WW design.   This
> > system is very similiar to the TAPR system.   The system is housed in an
> > attractive metal enclosure, has LEDs on the front panel and has 9-pin D
> > connectors for the Once port and serial port.   Price: $225.  Dave AG8B,
> > 517-835-1360.
> >
> > ---
> > You are currently subscribed to dsp as: bdheaton@c4i2.com
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >
>
>
> ---
> You are currently subscribed to dsp as: bdheaton@c4i2.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>


---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

26. [dsp] New version of SPY.EXE for the EVM available

```
From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Mon, 18 Dec 2000 09:31:40 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-125207-2000.12.18-08.44.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

Hello,

I put a new version of the SPY program for the EVM on my Web site:

http://users.bellatlantic.net/~dougnad

or

www.dougbraun.com

This version works at 57600 baud, and has a few bug fixes.
SPY is a handy program that lets you visualize data from
your EVM. You can use it in two ways:

1: Load the program scope1.asm or scope2.asm into your EVM, and
run SPY.EXE on your PC. You can then view the channel 1 or 2 input
data, either as a waveform or as a FFT spectrum display.

2: When debugging a "real" EVM program, you can add a strategically-placed
call to a Spy subroutine, which allows you to use SPY.EXE to trace in
real-time any data value in the program. Most of the EVM modem programs
already have the required code (which is activated by setting various
SpyWhatever flags).

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

January 2001

Original source file: dsp.0101
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0101

1. [dsp] dps93 and Yaesu

From: Rob Williams <vk3kos@amsat.org>
Date: Fri, 12 Jan 2001 08:10:27 +1100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-129220-2001.01.11-15.23.09--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Currently using dsp93 with ft736 for 400b AO-40, working fine

Will the same obj file work with the Yaeusu ft847 mike click TX etc

Thanks

Rob
VK3KOS

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: dps93 and Yaesu

From: Frank&Sue Perkins <fperkins@direcpc.com>
Date: Thu, 11 Jan 2001 20:49:42 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-129241-2001.01.11-21.02.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Rob,

If the same mic works on both rigs (tuning
clicks, etc.) then I am fairly sure the same
400b demod will work.

If not, let me know the details on the tuning
and I will try to tweak the code.

Regards,

Frank
WB5IPM

At 08:10 AM 1/12/01 +1100, you wrote:
>Currently using dsp93 with ft736 for 400b AO-40, working fine
>
>Will the same obj file work with the Yaeusu ft847 mike click TX etc
>
>Thanks
>
>Rob
>VK3KOS
>
>
>---
>You are currently subscribed to dsp as: fperkins@direcpc.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: EVM stuff

From: Douglas Braun NA1DB <dougnad@bellatlantic.net>
Date: Sun, 14 Jan 2001 10:42:12 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@lists.tapr.org
Message-ID: <LYR3532-129459-2001.01.14-09.55.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

I looked at the code for a while, but it was not at all obvious
what needed to be done, and I more or less ran out of time.
The author used a sort of unusual (for me, at least) coding
style that made it harder to figure out what had to be done.

BTW, even if the up-down radio tuning code worked, I don't
think it would be successful, since the actual tuning
step of most radios would probably be too large. For example,
my IC821 has a minimum step of 50 Hz, and I thing it would have
to be 10Hz to work.

Now, I use a PC-soundcard demodulator program (The AE7JY one
is my favorite). I have the PC available, and since it is a
receive-only operation, the hassle factor of hooking up the
PC instead of the EVM is not too large.

I may still get around to fixing the EVM program, but at the moment
the PC is getting the job done...

Doug

At 11:37 PM 1/13/01 , you wrote:
>Doug,
>
>Did you ever take a look at the code for the 400baud decode? I'm going to
>get my 2.4 station up and the command stations need telemetry desperately.
>I don't think the internal afc is going to work.
>
>Any way you could take a look and see how easy or hard it might be to
>support up/dwn buttons as a option. they are suppose to be there, but I
>think you found they don't work.
>
>We are going to need that with 2.4 and the orbit changes that are happening?
>
>Thanks tons in advance!
>Alan

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] dsp93

From: Rob Williams <vk3kos@amsat.org>
Date: Mon, 22 Jan 2001 10:49:13 +1100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-130624-2001.01.21-18.02.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi

Using a DSP93 on my FT736 for 400b A0-40 mike click

The Manual states on startup DSP93 will initialize to correspond how ports
are strapped.

My question can you have one strapped high and one strapped low, I would
like to use one
of the ports on my 847

Thanks

Rob

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

February 2001

Original source file: dsp.0102
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0102

1. [dsp] Flash for EVM56

From: "Larry Kayser" <kayser@sympatico.ca>
Date: Fri, 16 Feb 2001 21:04:23 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-135588-2001.02.16-20.22.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Greetings:

I have an EVM56K that I want to use with the PLXBOOT software. To do this I need a Flash EEPROM which I assume (knowing what ass u me means) that U10 is the hole were the EEPROM goes.   Is there anyone on here who can tell me which EEPROM I need and were I can get one are a reasonable price as well and anything else I need to know about the board before I solder a socket into that nice set of holes? What else do I need to know as well before I find by direct experiment that I don't know what I am doing......

Larry
VA3LK

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Test

From: "Donald Jacob" <djacob1@socal.rr.com>
Date: Sat, 17 Feb 2001 13:49:12 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-135701-2001.02.17-16.03.57--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Sorry for the bandwidth.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: Flash for EVM56

From: Rob Frohne <frohro@wwc.edu>
Date: Sat, 17 Feb 2001 18:27:08 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-135739-2001.02.17-20.41.40--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Larry,

You can find it on my web site describing the R2-DSP receiver. The site URL is:

http://www.wwc.edu/~frohro/R2_DSP/R2-DSP.html

It is the ATMEL AT29C256.

73,

Rob

Larry Kayser wrote:

> Greetings:
>
> I have an EVM56K that I want to use with the PLXBOOT software. To do this I
> need a Flash EEPROM which I assume (knowing what ass u me means) that U10 is
> the hole were the EEPROM goes.   Is there anyone on here who can tell me
> which EEPROM I need and were I can get one are a reasonable price as well
> and anything else I need to know about the board before I solder a socket
> into that nice set of holes? What else do I need to know as well before I

> find by direct experiment that I don't know what I am doing......
>
> Larry
> VA3LK
>
> ---
> You are currently subscribed to dsp as: FROHRO@WWC.EDU
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

--
Rob Frohne, Ph.D.
P.E., Professor
E. F. Cross School of Engineering
Walla Walla College
web page: http://www.wwc.edu/~frohro
e-mail: frohro@wwc.edu

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Help

From: "Donald Jacob" <djacob1@socal.rr.com>
Date: Sat, 17 Feb 2001 18:41:50 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-135742-2001.02.17-20.56.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I finally got off my duff and ordered the EVM-RI kit for my evaluation
board. Kit went together very easily, nice job TAPR!, when I powered up the
PWR and COP (with the heart on top) LED's come on. The software cannot fine
the EVM board! I have tried both the OnCE and serial port!
Any help or advice would be greatly appreciated!

Thanks
Don WB5EKU
DM04sg

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: Flash for EVM56

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Tue, 20 Feb 2001 11:36:10 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: kayser@sympatico.ca
Message-ID: <LYR3532-136277-2001.02.20-10.51.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Well, nothing bad can happen simply from soldering in a socket!
(Assuming you know how to solder...)

You need an Atmel AT29C256 chip.

Here are a couple of possible sources:

JDR Microdevices   www.jdr.com   (They claim to stock them for 44.39)
Halted Specialties   www.halted.com   (I got some there a few years ago.)

I have shopped from both places many times over the years, but in person,
not through mail order.

Doug
NA1DB

At 12:04 AM 2/17/01 , you wrote:
>Greetings:
>
>I have an EVM56K that I want to use with the PLXBOOT software. To do this I
>need a Flash EEPROM which I assume (knowing what ass u me means) that U10 is
>the hole were the EEPROM goes.   Is there anyone on here who can tell me
>which EEPROM I need and were I can get one are a reasonable price as well

>and anything else I need to know about the board before I solder a socket
>into that nice set of holes? What else do I need to know as well before I
>find by direct experiment that I don't know what I am doing......
>
>Larry
>VA3LK

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: Flash for EVM56

From: Johan Forrer <forrerj@peak.org>
Date: Tue, 20 Feb 2001 13:01:00 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-136349-2001.02.20-15.15.44--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

Think Doug meant JDR's price is 4.39 :) Worth getting a couple for the
junk box.

73

Johan, KC7WW

On Tue, 20 Feb 2001, Douglas Braun & Nadia Papakonstantinou wrote:

> Well, nothing bad can happen simply from soldering in a socket!
> (Assuming you know how to solder...)
>
> You need an Atmel AT29C256 chip.
>
> Here are a couple of possible sources:
>
> JDR Microdevices   www.jdr.com   (They claim to stock them for 44.39)
> Halted Specialties   www.halted.com   (I got some there a few years ago.)
>
> I have shopped from both places many times over the years, but in person,
> not through mail order.
>
>
> Doug
> NA1DB
>
>
> At 12:04 AM 2/17/01 , you wrote:
> >Greetings:
> >
> >I have an EVM56K that I want to use with the PLXBOOT software. To do this I
> >need a Flash EEPROM which I assume (knowing what ass u me means) that U10 is
> >the hole were the EEPROM goes.   Is there anyone on here who can tell me
> >which EEPROM I need and were I can get one are a reasonable price as well
> >and anything else I need to know about the board before I solder a socket
> >into that nice set of holes? What else do I need to know as well before I
> >find by direct experiment that I don't know what I am doing......
> >
> >Larry
> >VA3LK
>
>
> ---
> You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: Flash for EVM56

From: Douglas Braun & Nadia Papakonstantinou <dougnad@bellatlantic.net>
Date: Tue, 20 Feb 2001 22:11:18 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-136456-2001.02.20-21.26.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Oops, that's $4.39!!!

Doug
NA1DB

At 11:36 AM 2/20/01 , I wrote:
>JDR Microdevices   www.jdr.com   (They claim to stock them for 44.39)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: Flash for EVM56

From: Alberto di Bene <dibene@usa.net>
Date: Wed, 21 Feb 2001 14:03:47 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-136551-2001.02.21-07.20.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Douglas Braun & Nadia Papakonstantinou wrote:

> Well, nothing bad can happen simply from soldering in a socket!
> (Assuming you know how to solder...)
>
> You need an Atmel AT29C256 chip.
>

The EVM I have has the holes for that socket filled with solder...
what could be a safe procedure to clean them ? TNX

Alberto I2PHD

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: Flash for EVM56

From: Jon Iza <iapizloj@bi.ehu.es>
Date: Wed, 21 Feb 2001 12:39:21 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-136549-2001.02.21-07.05.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Folks,

> You need an Atmel AT29C256 chip.

I couldn't find the 256 chip, so I settle down for the 512 one.
I still have to fit it on place, but it won't be that bad.
Most of the pins are one-to-one although spacing is wider.
That will allow me to switch two banks of memory, the same
way as EA2BAJ/EA2ARU did with the EPROM multiboot system.

Be well
jon, ea2sn

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: Flash for EVM56

From: Johan Forrer <forrerj@peak.org>
Date: Wed, 21 Feb 2001 13:56:46 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-136687-2001.02.21-16.11.43--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Alberto,

I have sucessfully removed bad BIOS chips from PC motherboards using
a good quality solder wick and being careful to not apply too much heat to
cause damage to PCB traces (a new BIOS was programmed using a
PROM programmer.) Afterwards a socket was installed to accept the re-done

BIOS chip.

A solder sucker also works reasonable but you need liberal heat to get the
solder melted through the holes. More often than not, it would lift
solder pads if you're not careful.

It often is best to use a "cold" pin, i.e., a steel pin that won't solder;
heat the holes one at a time, pushing the solder out whilst melted. Clean
afterwards with a solder wick.

Otherwise, why not obtain a quality IC socket with longish pins -- then
solder-tack each pin to the filled hole using a fine-tipped soldering
iron. I think there is space on the PCB to manuever this?

Needless to say, here is where a bit soldering technique counts. Better
left alone if one is not comfortable with this challenge.

Hope this helps. 73,

Johan, KC7WW

On Wed, 21 Feb 2001, Alberto di Bene wrote:

> Douglas Braun & Nadia Papakonstantinou wrote:
>
> > Well, nothing bad can happen simply from soldering in a socket!
> > (Assuming you know how to solder...)
> >
> > You need an Atmel AT29C256 chip.
> >
>
> The EVM I have has the holes for that socket filled with solder...
> what could be a safe procedure to clean them ? TNX
>
> Alberto I2PHD
>
>
>
> ---
> You are currently subscribed to dsp as: FORRERJ@PEAK.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: Flash for EVM56

From: Alberto di Bene <dibene@usa.net>
Date: Thu, 22 Feb 2001 11:26:58 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-136797-2001.02.22-04.43.02--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Johan Forrer wrote:

> Hi Alberto,
>
> I have sucessfully removed bad BIOS chips from PC motherboards using
> a good quality solder wick and being careful to not apply too much heat to
> cause damage to PCB traces (a new BIOS was programmed using a
> PROM programmer.) Afterwards a socket was installed to accept the re-done
> BIOS chip.
> [snip]

Hi Johan,
             thanks for your informative reply.
While I cannot claim a master in the art of soldering, at least I know which the
hot end is ! You mention solder wick, is this a specially made thing, or can I use
some copper braid salvaged from a length of RG8 ? The copper braid is clean
and red in color, not oxidized. Can this absorb the solder adequately, or is the
solder wick much better for this task? Thanks for any clarification.

73 Alberto I2PHD

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March 2001

Original source file: dsp.0103
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0103

1. [dsp] Ltr to TAPR 1

From: "Robert P. McCabe" <rmccabe@sprintmail.com>
Date: Thu, 15 Mar 2001 23:16:03 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: "Robert & Joan McCabe" <rmccabe@sprintmail.com>
Message-ID: <LYR3532-822-2001.03.16-00.31.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

TAPR Leadership,

See attachment.
 Ltr to TAPR 1

Bob McCabe
W8JWK
[Attachment: Ltr to TAPR 1.doc; application/msword; 20,480 bytes]

2. [dsp] Internet Use

From: "Robert P. McCabe" <rmccabe@sprintmail.com>
Date: Fri, 16 Mar 2001 10:23:34 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: "Robert & Joan McCabe" <rmccabe@sprintmail.com>
Message-ID: <LYR3532-906-2001.03.16-11.39.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Robert P. McCabe

12201 Mohawk Road

Leawood, Kansas 66209

rmccabe@sprintmail.com

March 2, 2001

TAPR Leadership,

I urge you to utilize the Internet for "member only" distribution of the Packet Status Register, other information, voting, etc. However, for those that do not have access to the Internet you should send out paper copies and add a surcharge that will cover the mailing expenses. I would not want to see the door closed to any one that is a member. There are many advantages to using the Internet. It arrives in a form that can be stored easily. Members can save the articles they want. You could provide additional material such as tutorials. You don't have to wait a month to send out a correction.

With regards to the surcharge, the Internet users have to pay for the paper they use and the cost of maintaining a computer. You don't need to send out an email notification, send out the Register and also maintain a copy in your web site that members can access. If members have to individually retrieve a copy you will have one big traffic jam.

Sincerely,

Bob McCabe

W8JWK

3. [dsp] PB and PG v.2.0 - programs for communicating with Microsat satellites

From: Bent Bagger <Bent.Bagger@tellabs.com>
Date: Tue, 20 Mar 2001 09:00:57 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-1546-2001.03.20-02.14.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have uploaded version 2.0 of PB and PG for Linux to Metalab.unc.edu.
The file
name is pbpg-2.0.tar.gz. I have placed the file and the accompanying
lsm-file in /incoming/Linux. The target directory is

/pub/linux/apps/ham.
The file may also be downloaded from
ftp://ftp.amsat.org/amsat/software/Linux/pbpg-2.0.tar.gz.

The package has been changed substancially on several points relative to
the
previous releases:

1) PB and PG now adhere more closely to the File Hierarchy Standard
(FHS):
The configuration file is located in /etc/pbpg. The documentation is by
default installed in /usr/local/share/pbpg. The suggested run time
directory is
/var/spool/pbpg.

2) The configuration file is now common to PB and PG. Furthermore, the
new
configuration file contains the parameters for all satellites. The
satellite
of interest must be specified when calling the programs, either as a
command line parameter (-s) or as an environment variable (SATELLITE).

3) The internal structure of PB has been redesigned. PB has been split
into
two parts: an 'engine part' that takes care of the communication with
the
satellite and a 'presentation part' that takes care of presenting the
results
of PB's work to the operator. The engine part is 'pb' and the
presentation part
is 'pbctrl'. The two parts communicate over a FIFO and use an XML syntax
for
the data exchange. The basic functionality of PB has not been altered.

4) The package now uses a standard configure script. Details on the
installation may be found in the file INSTALL.

The lsm reads as follows:

```
Begin3
Title:          PB and PG for Linux
Version:        2.0
Entered-date:   9 MAR 2001

Description:    PB and PG for Linux are programs used for download from
and
                upload to digital satellites (Pacsats) supporting the FTL0
                protocol. This software allows you to directly communicate
                with the Microsat series of satellites. It provides a
                Curses (Ncurses) based user interface. It features automatic
                directory fill requests and simple, rules based file
                download requests.
                This version of the programs will work with kernel
                revisions 2.0.24 or higher.
Keywords:       AX.25
                Digital Satellites
                Pacsat
                FTL0
                Amateur Radio
Author:         oz6bl@amsat.org (Bent Bagger)
                oz2aba@amsat.org (Peter Scott Bentsen)
                and others.
Maintained-by:  oz6bl@amsat.org (Bent Bagger)
Primary-site:   metalab.unc.edu /pub/linux/apps/ham/pbpg-2.0.tar.gz
Alternate-site: ftp.amsat.org   /amsat/software/Linux/pbpg-2.0.tar.gz
Copying-policy: GPL.
End
```

Happy hamming

Bent/OZ6BL
(also oz6bl@amsat.org)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] FIR/IIR Notch Filter with No Group Delay?

From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
Date: Wed, 21 Mar 2001 21:39:02 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2005-2001.03.21-15.50.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

To all DSP/Maths gurus on the List,

    Can anyone tell me if it is possible to design a Notch Filter (FIR / IIR or any other type), with no group delay (or at least very small)?

    If it is, can you supply me with details or freeware or shareware to define the coeeficients for the filter! Please note that I am not very well briefed on these types of filters, so you you will have to use very plain and practical instructions, if indeed it is possible to implement such a Digital Filter.

    Many thanks and best regards to all,
        Fernando Carreiro (ZS6BLF)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] FIR/IIR Narrow Band Filter with No Group Delay?

From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
Date: Wed, 21 Mar 2001 22:02:46 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2012-2001.03.21-16.14.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello again all DSP gurus,

    In my previous message I meant to say "Narrow band pass filter" and not a "Notch filter". The message should read as follows:

> To all DSP/Maths gurus on the List,
>
>   Can anyone tell me if it is possible to design a Narrow Band Pass Filter (FIR / IIR
> or any other type), with no group delay (or at least very small)?
>
>   If it is, can you supply me with details or freeware or shareware to
> define the coeeficients for the filter! Please note that I am not very well
> briefed on these types of filters, so you you will have to use very plain
> and practical instructions, if indeed it is possible to implement such a
> Digital Filter.
>
>   Many thanks and best regards to all,
>   Fernando Carreiro (ZS6BLF)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

From: "Lyle Johnson" <wa7gxd@fidalgo.net>
Date: Wed, 21 Mar 2001 14:18:04 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2014-2001.03.21-16.33.22--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi!

I am no DSP guru, but...

1) There must be a delay. A filter works by averaging over time - no time means no filter.

2) IIR filters tend to have fewer taps, but much wider variance of group delay as you leave the center frequency.

3) FIR filters can be designed to provide very constant delay, but at the
expense of a large number of taps.

4) There seems to always be a trade off between amplitude response, phase
response, and delay.

5) Are you looking for an audio filter? An I.F. filter? An R.F. filter?
How narrow is "narrow" ?

6) How are you planning on implementing it? With a DSP chip, the math
functions of a pentium-class CPU, a couple of op-amps, ???

73,

Lyle

> -----Original Message-----
> From: bounce-dsp-14408@lists.tapr.org
> [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Fernando M. I.
> Carreiro
> Sent: Wednesday, March 21, 2001 2:03 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] FIR/IIR Narrow Band Filter with No Group Delay?
>
>
> Hello again all DSP gurus,
>
>   In my previous message I meant to say "Narrow band pass
> filter" and not
> a "Notch filter". The message should read as follows:
>
>
> > To all DSP/Maths gurus on the List,
> >
> >   Can anyone tell me if it is possible to design a Narrow Band Pass
> Filter (FIR / IIR
> > or any other type), with no group delay (or at least very small)?
> >
> >   If it is, can you supply me with details or freeware or shareware to
> > define the coeeficients for the filter! Please note that I am not very
> well
> > briefed on these types of filters, so you you will have to use
> very plain
> > and practical instructions, if indeed it is possible to implement such a
> > Digital Filter.
> >
> >   Many thanks and best regards to all,
> >   Fernando Carreiro (ZS6BLF)
>
>
>
> ---
> You are currently subscribed to dsp as: wa7gxd@email.msn.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
Date: Wed, 21 Mar 2001 23:05:37 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2023-2001.03.21-17.17.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Lyle,

    A little delay is acceptable, but to be kept to a minimum, but cannot be
larger than 1/2 the wavelength of the center frequency. In fact, I would
prefer that it was less than a 1/4 wavelength.

    Idealy, the sampled Signal Data will be output at a rate of 100-150MSPS
directly of the IF output. A 2-4kHz Narrow Band Pass filter is required for

a center frequency of about 1-2MHz. The implementation of the filter depends on its complexity and group delay, and would idealy be implemented on a Very High Speed DSP chip. The narrow bandwidth can be larger than 4kHz but would like to keep it below 15kHz.

The reason for such a high sample rate for such a small bandwidth, is because of the very high resolution required for processing the almost pure signal.

Fernando Carreiro (ZS6BLF)

----- Original Message -----
From: "Lyle Johnson" <wa7gxd@fidalgo.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Wednesday, March 21, 2001 10:18 PM
Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

> Hi!
>
> I am no DSP guru, but...
>
> 1) There must be a delay. A filter works by averaging over time - no time
> means no filter.
>
> 2) IIR filters tend to have fewer taps, but much wider variance of group
> delay as you leave the center frequency.
>
> 3) FIR filters can be designed to provide very constant delay, but at the
> expense of a large number of taps.
>
> 4) There seems to always be a trade off between amplitude response, phase
> response, and delay.
>
> 5) Are you looking for an audio filter? An I.F. filter? An R.F. filter?
> How narrow is "narrow" ?
>
> 6) How are you planning on implementing it? With a DSP chip, the math
> functions of a pentium-class CPU, a couple of op-amps, ???
>
> 73,
>
> Lyle
>
>
>
> > -----Original Message-----
> > From: bounce-dsp-14408@lists.tapr.org
> > [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Fernando M. I.
> > Carreiro
> > Sent: Wednesday, March 21, 2001 2:03 PM
> > To: TAPR DSP Special Interest Group
> > Subject: [dsp] FIR/IIR Narrow Band Filter with No Group Delay?
> >
> >
> > Hello again all DSP gurus,
> >
> > In my previous message I meant to say "Narrow band pass
> > filter" and not
> > a "Notch filter". The message should read as follows:
> >
> >
> > > To all DSP/Maths gurus on the List,
> > >
> > > Can anyone tell me if it is possible to design a Narrow Band Pass
> > Filter (FIR / IIR
> > > or any other type), with no group delay (or at least very small)?
> > >
> > > If it is, can you supply me with details or freeware or shareware
to
> > > define the coeeficients for the filter! Please note that I am not very
> > well
> > > briefed on these types of filters, so you you will have to use
> > very plain
> > > and practical instructions, if indeed it is possible to implement such
a
> > > Digital Filter.
> > >

> > >   Many thanks and best regards to all,
> > >   Fernando Carreiro (ZS6BLF)
> >
> >
> >
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8. [dsp] Re: FIR/IIR Notch Filter with No Group Delay?

From: "Frederick M. Spinner" <fspinner@hotmail.com>
Date: Thu, 22 Mar 2001 00:23:21 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2033-2001.03.21-18.39.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Someone can correct me if I am wrong, but doesn't FIR filters
by definition not have any group delay? I know there are no phase
shifts in a FIR filter. There of course is still time delay in
any digital filter, and FIR's will be worse in that respect because
they require quite a few more taps than a IIR does for the same
characteristics.

Fred Spinner, W0FMS

>From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
>Reply-To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>Subject: [dsp] FIR/IIR Notch Filter with No Group Delay?
>Date: Wed, 21 Mar 2001 21:39:02 -0000
>
>To all DSP/Maths gurus on the List,
>
>   Can anyone tell me if it is possible to design a Notch Filter (FIR /
>IIR
>or any other type), with no group delay (or at least very small)?
>
>   If it is, can you supply me with details or freeware or shareware to
>define the coeeficients for the filter! Please note that I am not very well
>briefed on these types of filters, so you you will have to use very plain
>and practical instructions, if indeed it is possible to implement such a
>Digital Filter.
>
>   Many thanks and best regards to all,
>   Fernando Carreiro (ZS6BLF)
>
>
>
>
>---
>You are currently subscribed to dsp as: FSPINNER@HOTMAIL.COM
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>

____
Get your FREE download of MSN Explorer at http://explorer.msn.com

---
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9. [dsp] Source for (cheap) High Speed ADC's

From: "David Schick" <ds@purdue.edu>
Date: Wed, 21 Mar 2001 22:51:42 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2070-2001.03.21-22.07.46--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I just hand some brainstorming sessions yesterday I was thinking about the possibilities of implementing
 an HRPT demodulator purely in software from
a 10.7 Mhz IF. The primary hang up is the ADC, which will probably have to be at least 14 bits doing
1-2 megahertz of bandwidth. I have not done any calculations to back that up, but it seems like a
reasonable
ballpark. Can anyone here speak to the validity of such an idea?
It would seem to me that one should be able to purchase an ADC with firewire output for cheap. The DSP
could possibly be done in a garden variety PC.

Anyway, I'm just throwing ideas out there because the list seems to be a bit quiet recently.

Dave Schick, W9OFA

10. [dsp] FIR Design software

From: "Nino Porcino" <porcino@sysonline.it>
Date: Thu, 22 Mar 2001 10:51:24 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2156-2001.03.22-04.13.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Fernando,

a very good FIR design program is "Scopefir" by Iowegian International
Corporation (http://www.iowegian.com). The demo version let you design
filter up to 32 taps wide.

Hope it helps,
- Nino Porcino
IZ8BLY

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: FIR/IIR Notch Filter with No Group Delay?

From: Major A <andras@users.sourceforge.net>
Date: Thu, 22 Mar 2001 10:20:24 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2157-2001.03.22-04.36.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> To all DSP/Maths gurus on the List,
>
>   Can anyone tell me if it is possible to design a Notch Filter (FIR / IIR
> or any other type), with no group delay (or at least very small)?

It would be against the principle of causality to have a filter with
no delay. For a simple calculation, use Heisenberg's principle: the
frequency resolution (in this case the edge sharpness of your filter)
is (roughly) the reciprocal of the time period over which the signal
is processed (for FIR filters this is simple the length of the filter
in time). Half of this time HAS to be before the actual signal,
because the FIR coefficients have to be symmetrical (otherwise you
would end up with complex output signals). So, for a 50Hz CW filter
with a form factor of 1.5, you would need a delay of roughly 40ms
(1/25Hz), for example.

73

  Andras DL9SEK (a lurker on the list)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: FIR/IIR Notch Filter with No Group Delay?

From: Alberto di Bene <dibene@usa.net>
Date: Thu, 22 Mar 2001 11:27:32 +0100

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2159-2001.03.22-04.44.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

"Frederick M. Spinner" wrote:

> Someone can correct me if I am wrong, but doesn't FIR filters
> by definition not have any group delay? I know there are no phase
> shifts in a FIR filter. There of course is still time delay in
> any digital filter, and FIR's will be worse in that respect because
> they require quite a few more taps than a IIR does for the same
> characteristics.
>

FIR filters can have *constant* group delay, provided that the
h coefficients are simmetrical about their center.
This means that the phase is directly proportional to the frequency,
so the delay is constant at all frequencies, avoiding i.e. distorsion
of pulse signals. But if the h coefficients are not simmetrical, you
can have horrendous phase responses...

73   Alberto   I2PHD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Re: Source for (cheap) High Speed ADC's

From: Major A <andras@users.sourceforge.net>
Date: Thu, 22 Mar 2001 10:52:10 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2162-2001.03.22-05.08.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> I just hand some brainstorming sessions yesterday I was thinking about the possibilities of
implementing an HRPT demodulator purely in software from
> a 10.7 Mhz IF. The primary hang up is the ADC, which will probably have to be at least 14 bits doing
> 1-2 megahertz of bandwidth. I have not done any calculations to back that up, but it seems like a
reasonable

Look on http://www.analog.com/, they currently have the fastest
high-resolution ADCs available. They are expensive and have parallel
interfaces only, i.e. you can't even interface them to the McBSP port
of a 'C6x DSP.

> It would seem to me that one should be able to purchase an ADC with firewire output for cheap. The
DSP could possibly be done in a garden variety PC.

Have you worked out what sample rate you need? You might find that you
want to wait for the next generation of DSPs (like the 'C64x, running
at 600MHz+) before you can do it. A PC will probably not do.

Anyone know of any working 10.7MHz digital IF? I have only heard of
15kHz (normal in commercial ham rigs) and 455kHz (very advanced).

I have thought of building a digital IF stage recently, but the
problem currently is DSP programming (TI gives away samples for free,
but you pay a fortune for their software). I would definitely go for
455kHz.

73,

  Andras dl9sek

==
Major Andras
    e-mail: andras@users.sourceforge.net
    www: http://www.physcip.uni-stuttgart.de/andras
==

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] Re: Source for (cheap) High Speed ADC's

From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
Date: Thu, 22 Mar 2001 11:50:12 -0000

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2172-2001.03.22-06.01.41--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

David,

    For some Hi-Tech data and pricing for a possible all-in-one solution,
take a look at the foolowing links:

        http://www.national.com/appinfo/wireless/0,1822,605,00.html

        http://www.national.com/appinfo/wireless/0,1822,631,00.html

        http://www.national.com/news/item/0,1735,391,00.html

----- Original Message -----
From: David Schick
To: TAPR DSP Special Interest Group
Sent: Thursday, March 22, 2001 3:51 AM
Subject: [dsp] Source for (cheap) High Speed ADC's

I just hand some brainstorming sessions yesterday I was thinking about the
possibilities of implementing an HRPT demodulator purely in software from
a 10.7 Mhz IF. The primary hang up is the ADC, which will probably have to
be at least 14 bits doing
1-2 megahertz of bandwidth. I have not done any calculations to back that
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ballpark. Can anyone here speak to the validity of such an idea?
It would seem to me that one should be able to purchase an ADC with firewire
output for cheap. The DSP could possibly be done in a garden variety PC.

Anyway, I'm just throwing ideas out there because the list seems to be a bit
quiet recently.

Dave Schick, W9OFA

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

From: Mastenbrook Gary-G13216 <Gary.Mastenbrook@motorola.com>
Date: Thu, 22 Mar 2001 08:44:02 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2205-2001.03.22-09.00.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Fernando- It seems as though you have the opportunity to use the "undersampling" technique for your RF IF solution. If you put a broad bandpass circuit on your IF (1 - 2 MHz) to remove the spectral components below 500 KHz or thereabouts, and only have one "signal" in this bandwidth, you can undersample the signal and save a LOT of processing power. (This works well within radio receivers to avoid high MIPS needed dealing directly with 2 MHz IF signals.)

Here's an example:
1. Implement a bandpass filter (or a high pass filter) from 1 to 2 MHz (or 1 MHz and up for the HP filter).
2. Construct a sample and hold circuit which can sample the IF signal quickly and then hold it for the longer time needed for the A/D sub-system.
3. Digitize the output of the S/H circuit at >2 times the expected modulation bandwidth (4-15 KHz BW >>> 10-40 KHz sample rate).
4. Implement your bandpass filter. (Leads us back to your original question about group delay?)

Our ARRL's QEX magazine had a series of articles by Doug Smith (one of the Kachina designers) which dealt with radio IF systems implemented in DSP. If you haven't already seen it, it's a good resource to consider reviewing.

On the other hand, if you're trying to channelize your 1-2 MHz IF bandwidth with direct sampling (leading to the MSPS numbers you quoted below), then please ignore this response. You're going to have a LOT of fun with this design challenge... :o)

One other question: Is the total delay through the system of concern, or is just the differential group delay across the 15 KHz signal bandwidth the issue? As Lyle says, the total delay must be other than zero, but with sufficient taps in your filter, you can achieve a very low differential group delay across your signal bandwidth. Do you have FIR design tools to calculate the tap coefficients and simluate the performance? I've used MathCad for this in the past, but know that there are some free tools out there for FIR and IIR design and simulation.

73's

Gary N8DMT

Gary Mastenbrook, Product Visioneering
Location Solutions Center, Motorola, Inc.
50 E. Commerce Drive, Schaumburg, IL 60173
Email: gary.mastenbrook@[anti-spam_remove_brackets]motorola.com
Work Home Page: http://www.mot.com/
Personal Home Page: http://www.qsl.net/n8dmt

-----Original Message-----
From: Fernando M. I. Carreiro [mailto:fmi@carreiro.com]
Sent: Wednesday, March 21, 2001 5:06 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

Hello Lyle,

A little delay is acceptable, but to be kept to a minimum, but cannot be larger than 1/2 the wavelength of the center frequency. In fact, I would prefer that it was less than a 1/4 wavelength.

Idealy, the sampled Signal Data will be output at a rate of 100-150MSPS directly of the IF output. A 2-4kHz Narrow Band Pass filter is required for a center frequency of about 1-2MHz. The implementation of the filter depends on its complexity and group delay, and would idealy be implemented on a Very High Speed DSP chip. The narrow bandwidth can be larger than 4kHz but would like to keep it below 15kHz.

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Fernando Carreiro (ZS6BLF)

----- Original Message -----
From: "Lyle Johnson" <wa7gxd@fidalgo.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Wednesday, March 21, 2001 10:18 PM
Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

> Hi!
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> How narrow is "narrow" ?
>
> 6) How are you planning on implementing it? With a DSP chip, the math
> functions of a pentium-class CPU, a couple of op-amps, ???
>
> 73,
>
> Lyle
>
>
>
> > -----Original Message-----
> > From: bounce-dsp-14408@lists.tapr.org
> > [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Fernando M. I.
> > Carreiro

> > Sent: Wednesday, March 21, 2001 2:03 PM
> > To: TAPR DSP Special Interest Group
> > Subject: [dsp] FIR/IIR Narrow Band Filter with No Group Delay?
> >
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> > Hello again all DSP gurus,
> >
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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
Date: Thu, 22 Mar 2001 16:52:07 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2221-2001.03.22-11.03.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Gary,

    Due to the particular type of modulation used and very fine resolution
required, I cannot use a lower sampling rate, nor can I reduce the IF
bandwidth, nor can I filter the IF in the conventional manner.

    Also, the signal will NOT be the only on the IF bandwidth, so a very
sharp Narrow Band Filter is required that has a group delay as low as
possible, as any group delay larger than 1/4-1/2 center frequency
wavelength, will defeat this type of high speed digital modulation.

    I could use a Crystal Type Mono filter, which has almost no group delay
at the center frequency, but I require a software programmable filter so
that the center frequency can change over the IF bandwidth. A hardware
filter is limiting in this respect (fixed to the crystal frequency)!

    With respects to the diferencial group delay - Yes - Total delay is not
a problem! Only the group delay at the 2-4KHz Bandpass should be close to

zero, but I have no idea how to design it to be so (very little knowledge on these types of filters). I also use MathCAD! Do you have and routines to design such a filter. I have downloaded some FIR and IIR shareware, but none have a means to define the group delay! Any suggestions?

Fernando,

----- Original Message -----
From: "Mastenbrook Gary-G13216" <Gary.Mastenbrook@motorola.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, March 22, 2001 2:44 PM
Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

> Fernando- It seems as though you have the opportunity to use the "undersampling" technique for your RF IF solution. If you put a broad bandpass circuit on your IF (1 - 2 MHz) to remove the spectral components below 500 KHz or thereabouts, and only have one "signal" in this bandwidth, you can undersample the signal and save a LOT of processing power. (This works well within radio receivers to avoid high MIPS needed dealing directly with 2 MHz IF signals.)
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>
> 73's
>
> Gary N8DMT
>
> Gary Mastenbrook, Product Visioneering
> Location Solutions Center, Motorola, Inc.
> 50 E. Commerce Drive, Schaumburg, IL 60173
> Email: gary.mastenbrook@[anti-spam_remove_brackets]motorola.com
> Work Home Page: http://www.mot.com/
> Personal Home Page: http://www.qsl.net/n8dmt
>
>
> -----Original Message-----
> From: Fernando M. I. Carreiro [mailto:fmi@carreiro.com]
> Sent: Wednesday, March 21, 2001 5:06 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?
>
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> Hello Lyle,
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>
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>
>
> ----- Original Message -----
> From: "Lyle Johnson" <wa7gxd@fidalgo.net>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Wednesday, March 21, 2001 10:18 PM
> Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?
>
>
> > Hi!
> >
> > I am no DSP guru, but...
> >
> > 1) There must be a delay. A filter works by averaging over time - no
time
> > means no filter.
> >
> > 2) IIR filters tend to have fewer taps, but much wider variance of group
> > delay as you leave the center frequency.
> >
> > 3) FIR filters can be designed to provide very constant delay, but at
the
> > expense of a large number of taps.
> >
> > 4) There seems to always be a trade off between amplitude response,
phase
> > response, and delay.
> >
> > 5) Are you looking for an audio filter? An I.F. filter? An R.F.
filter?
> > How narrow is "narrow" ?
> >
> > 6) How are you planning on implementing it? With a DSP chip, the math
> > functions of a pentium-class CPU, a couple of op-amps, ???
> >
> > 73,
> >
> > Lyle
> >
> >
> >
> > > -----Original Message-----
> > > From: bounce-dsp-14408@lists.tapr.org
> > > [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Fernando M. I.
> > > Carreiro
> > > Sent: Wednesday, March 21, 2001 2:03 PM
> > > To: TAPR DSP Special Interest Group
> > > Subject: [dsp] FIR/IIR Narrow Band Filter with No Group Delay?
> > >
> > >
> > > Hello again all DSP gurus,
> > >
> > >   In my previous message I meant to say "Narrow band pass
> > > filter" and not
> > > a "Notch filter". The message should read as follows:
> > >
> > >
> > > > To all DSP/Maths gurus on the List,
> > > >
> > > >   Can anyone tell me if it is possible to design a Narrow Band
Pass
> > > Filter (FIR / IIR
> > > > or any other type), with no group delay (or at least very small)?
> > > >

> > > >   If it is, can you supply me with details or freeware or
shareware
> to
> > > > define the coeeficients for the filter! Please note that I am not
very
> > > well
> > > > briefed on these types of filters, so you you will have to use
> > > very plain
> > > > and practical instructions, if indeed it is possible to implement
such
> a
> > > > Digital Filter.
> > > >
> > > >   Many thanks and best regards to all,
> > > >   Fernando Carreiro (ZS6BLF)
> > >
> > >
> > >
> > > ---
> > > You are currently subscribed to dsp as: wa7gxd@email.msn.com
> > > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> > >
> >
> >
> > ---
> > You are currently subscribed to dsp as: FMI@CARREIRO.COM
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >
> >
> >
> ---
> You are currently subscribed to dsp as: Gary.Mastenbrook@motorola.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
> ---
> You are currently subscribed to dsp as: FMI@CARREIRO.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?

From: "Lyle Johnson" <wa7gxd@fidalgo.net>
Date: Thu, 22 Mar 2001 09:03:40 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-2223-2001.03.22-11.19.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Fernando!

You might also use the crystal filter (simple, cheap) and then just tune the
L.O. that is downconverting to the I.F. to effect the "shift" you are
referring to.

This all sounds suspiciously like VMSK/2 filtering...

73,

Lyle

> -----Original Message-----
> From: bounce-dsp-14408@lists.tapr.org
> [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Fernando M. I.
> Carreiro
> Sent: Thursday, March 22, 2001 8:52 AM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?
>
>
> Hello Gary,
>
>   Due to the particular type of modulation used and very fine resolution
> required, I cannot use a lower sampling rate, nor can I reduce the IF
> bandwidth, nor can I filter the IF in the conventional manner.

>
>   Also, the signal will NOT be the only on the IF bandwidth, so a very
> sharp Narrow Band Filter is required that has a group delay as low as
> possible, as any group delay larger than 1/4-1/2 center frequency
> wavelength, will defeat this type of high speed digital modulation.
>
>   I could use a Crystal Type Mono filter, which has almost no
> group delay
> at the center frequency, but I require a software programmable filter so
> that the center frequency can change over the IF bandwidth. A hardware
> filter is limiting in this respect (fixed to the crystal frequency)!
>
>   With respects to the diferencial group delay - Yes - Total
> delay is not
> a problem! Only the group delay at the 2-4KHz Bandpass should be close to
> zero, but I have no idea how to design it to be so (very little
> knowledge on
> these types of filters). I also use MathCAD! Do you have and routines to
> design such a filter. I have downloaded some FIR and IIR
> shareware, but none
> have a means to define the group delay! Any suggestions?
>
>   Fernando,
>
> ----- Original Message -----
> From: "Mastenbrook Gary-G13216" <Gary.Mastenbrook@motorola.com>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Thursday, March 22, 2001 2:44 PM
> Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?
>
>
> > Fernando- It seems as though you have the opportunity to use the
> "undersampling" technique for your RF IF solution. If you put a broad
> bandpass circuit on your IF (1 - 2 MHz) to remove the spectral components
> below 500 KHz or thereabouts, and only have one "signal" in this
> bandwidth,
> you can undersample the signal and save a LOT of processing power. (This
> works well within radio receivers to avoid high MIPS needed
> dealing directly
> with 2 MHz IF signals.)
> >
> > Here's an example:
> > 1. Implement a bandpass filter (or a high pass filter) from 1
> to 2 MHz (or
> 1 MHz and up for the HP filter).
> > 2. Construct a sample and hold circuit which can sample the IF signal
> quickly and then hold it for the longer time needed for the A/D
> sub-system.
> > 3. Digitize the output of the S/H circuit at >2 times the expected
> modulation bandwidth (4-15 KHz BW >>> 10-40 KHz sample rate).
> > 4. Implement your bandpass filter. (Leads us back to your original
> question about group delay?)
> >
> > Our ARRL's QEX magazine had a series of articles by Doug Smith
> (one of the
> Kachina designers) which dealt with radio IF systems implemented
> in DSP. If
> you haven't already seen it, it's a good resource to consider reviewing.
> >
> > On the other hand, if you're trying to channelize your 1-2 MHz IF
> bandwidth with direct sampling (leading to the MSPS numbers you quoted
> below), then please ignore this response. You're going to have a
> LOT of fun
> with this design challenge... :o)
> >
> > One other question: Is the total delay through the system of
> concern, or
> is just the differential group delay across the 15 KHz signal
> bandwidth the
> issue? As Lyle says, the total delay must be other than zero, but with
> sufficient taps in your filter, you can achieve a very low differential
> group delay across your signal bandwidth. Do you have FIR design tools to
> calculate the tap coefficients and simluate the performance? I've used
> MathCad for this in the past, but know that there are some free tools out
> there for FIR and IIR design and simulation.
> >
> > 73's
> >
> > Gary N8DMT

> >
> > Gary Mastenbrook, Product Visioneering
> > Location Solutions Center, Motorola, Inc.
> > 50 E. Commerce Drive, Schaumburg, IL 60173
> > Email: gary.mastenbrook@[anti-spam_remove_brackets]motorola.com
> > Work Home Page: http://www.mot.com/
> > Personal Home Page: http://www.qsl.net/n8dmt
> >
> >
> > -----Original Message-----
> > From: Fernando M. I. Carreiro [mailto:fmi@carreiro.com]
> > Sent: Wednesday, March 21, 2001 5:06 PM
> > To: TAPR DSP Special Interest Group
> > Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?
> >
> >
> > Hello Lyle,
> >
> >   A little delay is acceptable, but to be kept to a minimum,
> but cannot
> be
> > larger than 1/2 the wavelength of the center frequency. In fact, I would
> > prefer that it was less than a 1/4 wavelength.
> >
> >   Idealy, the sampled Signal Data will be output at a rate of
> 100-150MSPS
> > directly of the IF output. A 2-4kHz Narrow Band Pass filter is required
> for
> > a center frequency of about 1-2MHz. The implementation of the filter
> depends
> > on its complexity and group delay, and would idealy be implemented on a
> Very
> > High Speed DSP chip. The narrow bandwidth can be larger than 4kHz but
> would
> > like to keep it below 15kHz.
> >
> >   The reason for such a high sample rate for such a small
> bandwidth, is
> > because of the very high resolution required for processing the almost
> pure
> > signal.
> >
> >   Fernando Carreiro (ZS6BLF)
> >
> >
> > ----- Original Message -----
> > From: "Lyle Johnson" <wa7gxd@fidalgo.net>
> > To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> > Sent: Wednesday, March 21, 2001 10:18 PM
> > Subject: [dsp] RE: FIR/IIR Narrow Band Filter with No Group Delay?
> >
> >
> > > Hi!
> > >
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> > >
> > > 1) There must be a delay. A filter works by averaging over time - no
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> > > means no filter.
> > >
> > > 2) IIR filters tend to have fewer taps, but much wider
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> > > delay as you leave the center frequency.
> > >
> > > 3) FIR filters can be designed to provide very constant delay, but at
> the
> > > expense of a large number of taps.
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> phase
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> > > 6) How are you planning on implementing it? With a DSP chip, the math
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> > >

> > > 73,
> > >
> > > Lyle
> > >
> > >
> > >
> > > > -----Original Message-----
> > > > From: bounce-dsp-14408@lists.tapr.org
> > > > [mailto:bounce-dsp-14408@lists.tapr.org]On Behalf Of Fernando M. I.
> > > > Carreiro
> > > > Sent: Wednesday, March 21, 2001 2:03 PM
> > > > To: TAPR DSP Special Interest Group
> > > > Subject: [dsp] FIR/IIR Narrow Band Filter with No Group Delay?
> > > > >
> > > > >
> > > > > Hello again all DSP gurus,
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> > > > >   In my previous message I meant to say "Narrow band pass
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> > > > > a "Notch filter". The message should read as follows:
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> > > > > > To all DSP/Maths gurus on the List,
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> > > > > >   Can anyone tell me if it is possible to design a Narrow Band
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> > > > > Filter (FIR / IIR
> > > > > > or any other type), with no group delay (or at least very small)?
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> > > > > >   If it is, can you supply me with details or freeware or
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> > > to
> > > > > > define the coeeficients for the filter! Please note that I am not
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> > > > > > briefed on these types of filters, so you you will have to use
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> > > > > > Digital Filter.
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> > > > > >   Many thanks and best regards to all,
> > > > > >   Fernando Carreiro (ZS6BLF)
> > > > > >
> > > > > >
> > > > > >
> > > > > > ---
> > > > > > You are currently subscribed to dsp as: wa7gxd@email.msn.com
> > > > > > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> > > > > >
> > > > >
> > > > >
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> > >

You are currently subscribed to dsp as: lyris.dsp@tapr.org

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] 56k2 EVM and DL.exe

From: "Bjoern Stokke" <bstokke@world-online.no>
Date: Wed, 28 Mar 2001 09:47:52 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-3374-2001.03.28-13.07.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Folks,

I need some help re: dl.exe ver. aug 01.2000 (57k6)

I am using the 56k2 EVM board with the eprom, and I need
to d/l programs using dl.exe on com port 6 , with a NetMos pci serial card.

Seems that dl.exe does not like com 6 at all.

Question is has anybody used dl.exe on any other than the "normal"
com ports 1 or 2 ?

regards
Bjoern Stokke LA5ZL

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Re: 56k2 EVM and DL.exe

From: "Mark L. Hammond" <hammond@surrealnet.net>
Date: Wed, 28 Mar 2001 13:55:16 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-3375-2001.03.28-13.11.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I'm using a variant called dl32.exe that supports com 4 (as that is what
I'm using). Not sure about ports above 4?

Seem like Doug NA1DB has it on his site? And probably the ftp.tapr.org
site as well?

There are several versions/flavors of the "dl" program out there...

73,

Mark

At 09:47 AM 3/28/01 +0200, you wrote:
>Folks,
>
>I need some help re: dl.exe ver. aug 01.2000 (57k6)
>
>I am using the 56k2 EVM board with the eprom, and I need
>to d/l programs using dl.exe on com port 6 , with a NetMos pci serial card.
>
>Seems that dl.exe does not like com 6 at all.
>
>Question is has anybody used dl.exe on any other than the "normal"
>com ports 1 or 2 ?
>
>
>
>regards
>Bjoern Stokke LA5ZL
>
>
>
>
>---
>You are currently subscribed to dsp as: hammond@surrealnet.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

Mark L. Hammond [N8MH]

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] Re: 56k2 EVM and DL.exe

From: Doug Braun <dougnad@bellatlantic.net>
Date: Wed, 28 Mar 2001 19:35:16 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-3426-2001.03.28-18.51.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The original DOS dl.exe only worked with "classic" PC-style com1-4 ports.
At www.dougbraun.com, you will find dl32.exe, which will work with any
serial port that is supported by Windows.

One other person has also ported dl.exe to Windows, but I can't
remember any more details about it.

Doug
NA1DB

At 02:47 AM 3/28/01 , you wrote:
>Folks,
>
>I need some help re: dl.exe ver. aug 01.2000 (57k6)
>
>I am using the 56k2 EVM board with the eprom, and I need
>to d/l programs using dl.exe on com port 6 , with a NetMos pci serial card.
>
>Seems that dl.exe does not like com 6 at all.
>
>Question is has anybody used dl.exe on any other than the "normal"
>com ports 1 or 2 ?
>
>
>
>regards
>Bjoern Stokke LA5ZL
>
>
>
>
>---
>You are currently subscribed to dsp as: dougnad@bellatlantic.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

21. [dsp] New email address

From: Douglas Braun NA1DB <doug@dougbraun.com>
Date: Wed, 28 Mar 2001 19:56:20 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-3437-2001.03.28-19.12.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

FYI:

My new "official" email address is doug@dougbraun.com.
I am trying to slowly phase out various other email
addresses I have had in the past.

Also, www.dougbraun.com is now a "real" Web site
with out any of those banner ads or other junk
that comes with free Web sites.

Doug
NA1DB

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

April 2001

Original source file: dsp.0104
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0104

1. [dsp] OT: DAMA specification

From: Eduardo Jacob <jtpjatae@bi.ehu.es>
Date: Thu, 05 Apr 2001 17:42:44 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-5073-2001.04.05-11.00.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am searching a low level specification of the DAMA protocol (in the way
AX.25 2.2 is). In the Internet I have only found it in German (I think
actually it is it). If it appeared in some AMSAT or TAPR proceedings, let
me know.

         Eduardo

Eduardo EA2BAJ
DSP and HAM: http://det.bi.ehu.es/~jtpjatae/ham.html
PSK31 WWW Page: http://aintel.bi.ehu.es/psk31.hmtl
VHF PACKET: EA2BAJ @ EA2URV
PGP Key avlb: Send email w/subject: PGPKEY
fingerprint : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: OT: DAMA specification

From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
Date: Fri, 6 Apr 2001 15:33:13 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-5258-2001.04.06-09.51.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Eduardo,

    Try the following links for more info ...

http://www.stack.serpukhov.su/~victor/hamradio/packet/dama.txt
http://aurora.eexi.gr/~sv1rd/dama.txt

http://www.tapr.org/tapr/html/Fax25.html

----- Original Message -----
From: "Eduardo Jacob" <jtpjatae@bi.ehu.es>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, April 05, 2001 4:42 PM
Subject: [dsp] OT: DAMA specification

> I am searching a low level specification of the DAMA protocol (in the way
> AX.25 2.2 is). In the Internet I have only found it in German (I think
> actually it is it). If it appeared in some AMSAT or TAPR proceedings, let
> me know.
>
>   Eduardo
>
>
> ---
> Eduardo EA2BAJ
> DSP and HAM: http://det.bi.ehu.es/~jtpjatae/ham.html
> PSK31 WWW Page: http://aintel.bi.ehu.es/psk31.hmtl
> VHF PACKET: EA2BAJ @ EA2URV
> PGP Key avlb: Send email w/subject: PGPKEY
> fingerprint : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD
>
>
> ---
> You are currently subscribed to dsp as: FMI@CARREIRO.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: OT: DAMA specification

From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
Date: Fri, 6 Apr 2001 15:41:54 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-5263-2001.04.06-09.58.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello again Eduardo,

    You might find some DAMA specs at the following links, but I am unsure
of if it is of a general nature or specific to MIL standrads:

http://ax.laafb.af.mil/~gowerj/jta/appb.htm

http://arch-odisc4.army.mil/aes/aea/jta-a/jtaa55/html/jtaa55hl.htm

----- Original Message -----
From: "Eduardo Jacob" <jtpjatae@bi.ehu.es>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, April 05, 2001 4:42 PM
Subject: [dsp] OT: DAMA specification

> I am searching a low level specification of the DAMA protocol (in the way
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>
>   Eduardo
>
>
> --
> Eduardo EA2BAJ
> DSP and HAM: http://det.bi.ehu.es/~jtpjatae/ham.html
> PSK31 WWW Page: http://aintel.bi.ehu.es/psk31.hmtl
> VHF PACKET: EA2BAJ @ EA2URV
> PGP Key avlb: Send email w/subject: PGPKEY
> fingerprint : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD
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> ---
> You are currently subscribed to dsp as: FMI@CARREIRO.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: OT: DAMA specification

From: "Fernando M. I. Carreiro" <fmi@carreiro.com>
Date: Fri, 6 Apr 2001 15:45:32 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-5265-2001.04.06-10.02.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello again Eduardo,

    You might find some info by contacting the developers of FlexNet as it
has a DAMA implementation:

http://www.owenduffy.com.au/electronics/flexnet/flexnode.htm#DAMA

----- Original Message -----
From: "Eduardo Jacob" <jtpjatae@bi.ehu.es>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, April 05, 2001 4:42 PM
Subject: [dsp] OT: DAMA specification

> I am searching a low level specification of the DAMA protocol (in the way
> AX.25 2.2 is). In the Internet I have only found it in German (I think
> actually it is it). If it appeared in some AMSAT or TAPR proceedings, let
> me know.
>
>   Eduardo
>
>
> ---
> Eduardo EA2BAJ
> DSP and HAM: http://det.bi.ehu.es/~jtpjatae/ham.html
> PSK31 WWW Page: http://aintel.bi.ehu.es/psk31.hmtl
> VHF PACKET: EA2BAJ @ EA2URV
> PGP Key avlb: Send email w/subject: PGPKEY
> fingerprint : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD
>
>
> ---
> You are currently subscribed to dsp as: FMI@CARREIRO.COM
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: EVM-RI g3ruh modem & TS790.

From: Douglas Braun NA1DB <doug@dougbraun.com>
Date: Fri, 06 Apr 2001 18:51:34 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-5352-2001.04.06-18.08.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

BIOS2 itself supports the standard TNC TxDelay, etc. parameters.
It's just a little obscure how they are changed.

Here is the code in BIOS2 that sets up the default values:

```
; KISS parameter table (here because of fixed address)
kisspar dc      @cvi(50*baud/100.0)                ; txdelay
         dc      63                                 ; P
         dc      @cvi(10*baud/100.0)                ; SlotTim
         dc      @cvi(1*baud/100.0)                 ; TXtail
         dc      0                                  ; FullDup
```

G3RUH.ASM overrides the FullDup parameter, naturally.
If necessary you can patch G3RUH or BIOS2 itself to change
the values. Look at some of the other modem programs
for examples.

But none of these really affect packet reception, only
transmission. If your radio is OK, and the other station
is transmitting real G3RUH format data, I can't imagine
why you would receive nothing.

Doug
NA1DB

At 06:01 PM 4/6/01 , Vince Fiscus, KB7ADL wrote:
>I don't think the g3ruh modem is good for terrestrial packet. I receive packets ok from the node, and can send packets ok, But once connected I hardly get anything. I believe the problem might be that the EVM responds to quickly for the node and there aren't any adjustments for delay settings in the g3ruh modem like you find in a standard TNC's. The g3ruh modem is probably best used for Full-duplex satellite operation. I'd still like to find out if anyone is using the EVM for 9600 terrestrial packet. I still need to check levels with a scope to be sure things are set right.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: EVM-RI g3ruh modem & TS790.

From: Tomi Manninen <tpm@prkele.tky.hut.fi>
Date: Sat, 7 Apr 2001 02:30:31 +0300 (EEST)

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-5355-2001.04.06-18.47.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Not to say I had too much experience with EVM and 9k6 packet, what Vince
is saying might have more to do with the Tx-to-Rx delay of the rigs
involved. As using substandard rigs for amateur packet is more like a
standard I have seen several cases where this is the problem: the other
end acks the data too quickly. The station sending data hasn't completed
switching from tx to rx and the ack is missed...

Years ago I did some tests with my 2m handheld I still use for packet and
the tx-to-rx recovery times I got were up to 80ms. That can certainly ruin
the channel performance and I don't think my rig is any worse than the
average.

The KISS model is probably always going to be a substandard channel access
method but I'd like to suggest at least a tunable "minimum idle" period as
an additional parameter to anyone designing a new KISS implementation. I
also have another idea for the p-persistence model I'd like to discuss
with someone really in to these issues. Probably something someone in the
know would shoot it down in a minute... :)

On Fri, 6 Apr 2001, Douglas Braun NA1DB wrote:
> But none of these really affect packet reception, only
> transmission. If your radio is OK, and the other station
> is transmitting real G3RUH format data, I can't imagine
> why you would receive nothing.
>
> At 06:01 PM 4/6/01 , Vince Fiscus, KB7ADL wrote:
>> I don't think the
>> g3ruh modem is good for terrestrial packet. I receive packets ok from
>> the node, and can send packets ok, But once connected I hardly get
>> anything. I believe the problem might be that the EVM responds to
>> quickly for the node and there aren't any adjustments for delay
>> settings in the g3ruh modem like you find in a standard TNC's. The
>> g3ruh modem is probably best used for Full-duplex satellite operation.
>> I'd still like to find out if anyone is using the EVM for 9600
>> terrestrial packet. I still need to check levels with a scope to be
>> sure things are set right.

--
Tomi Manninen   Internet: oh2bns@sral.fi
OH2BNS   AX.25:   oh2bns@oh2rbi.fin.eu
KP20ME04   Amprnet: oh2bns@oh2rbi.ampr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Weak signals

From: Edson Pereira <edson@fe.xdsl.ne.jp>
Date: Sun, 8 Apr 2001 05:14:31 +0000 (GMT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-5538-2001.04.07-00.32.02--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Greetings,

I have observed that sometimes I can have good reception of MFSK16 signals
on HF that are not audible and can barely be seen on the waterfall FFT
display. If the signal was not stronger at the time I started receiving, I
would not have found it.

I believe that if there was some type of signature such as a constant
unmodulated carrier for a precise interval before the actual transmission,
it would be easier to identify weak signals on FFT displays. The signature
would be used for visual recognition but could also be used for machine
recognition using multiple averaged FFTs, for example. The signature could
also be used as an aid for tuning.

The above is just an idea among others. I would like to discuss the topic
with the group.

73,

-- Edson, pu1jte, n1vtn, 7n4ncl

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] R: Weak signals

From: "Nino Porcino" <porcino@sysonline.it>
Date: Sun, 8 Apr 2001 09:59:19 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-5580-2001.04.08-03.22.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>
> I believe that if there was some type of signature such as a constant
> unmodulated carrier for a precise interval before the actual transmission,
> it would be easier to identify weak signals on FFT displays. The signature
> would be used for visual recognition but could also be used for machine
> recognition using multiple averaged FFTs, for example. The signature could
> also be used as an aid for tuning.
>

Actually it is so (at least in my Stream program). There is an unmodulated
carrier before of each transmission corresponding to the lowest tone. It is
used for recognition, for fine tuning and to manually fill with zeroes the
interleaver buffer and the K-state-word of the Viterbi decoder.

That carrier also appears when the trasmit buffer goes empty (idle) but is
interlaced with NUL symbols to keep the synch with the symbol clock.

73,
- Nino
IZ8BLY

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

May 2001

Original source file: dsp.0105
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0105

1. [dsp] Fw: dsp digest: July 19, 2000

From: "Carlos Fiestas" <cfiestas@inictel.gob.pe>
Date: Tue, 8 May 2001 10:39:38 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-11621-2001.05.08-10.41.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/html

Help

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: Fw: dsp digest: July 19, 2000

From: Boris.Smeds@esa.int
Date: Tue, 8 May 2001 21:23:37 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-11674-2001.05.08-14.40.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

A mail with this subject from Carlos Fiestas contained an attachment with a
virus VBS.Help.A@mm

Regards
Boris

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Anybody there?

From: David Medley <d.j.medley@att.net>
Date: Fri, 25 May 2001 20:01:28 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-14799-2001.05.25-20.21.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I joined this list again a few days ago but have seen no activity. Is this
list dead or what?
Regards
Dave KI6QE/5

end

Regards
David Medley
1305 Rockmoor Drive
Edgecliff Village TX 76134
These radios are used daily here for short wave listening. They are not for
sale.
R-390A with Kleronomos Audio and solid state current reg.
R-391 with fully operational autotune.
AR-88 LF in beautiful condition.

For parts and information re R-390 radios please check my Web Page at:
<http://home.att.net/~d.j.medley>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: Anybody there?

From: "W5SNX" <w5snx@atl.mediaone.net>
Date: Sat, 26 May 2001 01:08:48 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-14801-2001.05.25-20.27.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

There are some of us on it David. 73 de Dick W5SNX in EM73 Stone Mountain GA

----- Original Message -----
From: David Medley <d.j.medley@att.net>
To: TAPR DSP Special Interest Group <dsp@lists.tapr.org>
Sent: Saturday, May 26, 2001 02:01
Subject: [dsp] Anybody there?

> I joined this list again a few days ago but have seen no activity. Is this
> list dead or what?
> Regards
> Dave KI6QE/5
>
> end
>
> Regards
> David Medley
> 1305 Rockmoor Drive
> Edgecliff Village TX 76134
> These radios are used daily here for short wave listening. They are not
for
> sale.
> R-390A with Kleronomos Audio and solid state current reg.
> R-391 with fully operational autotune.
> AR-88 LF in beautiful condition.
>
> For parts and information re R-390 radios please check my Web Page at:
> <http://home.att.net/~d.j.medley>
>
>
> ---
> You are currently subscribed to dsp as: w5snx@atl.mediaone.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: Anybody there?

From: David Medley <d.j.medley@att.net>
Date: Sun, 27 May 2001 15:06:21 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@lists.tapr.org
Message-ID: <LYR3532-15082-2001.05.27-15.29.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Dick. I was beginning to think that the DSP93 had died and gone to heaven!!
I built a DSP93 from the first batch and used it for a few years. Then my
health started giving me problems and I had to give up Ham Radio.
Subsequently we moved to Texas to be near our daughter so she could give us
some support. I am now feeling much better and thinking about particularly
AO40. My questions are:
1. Does anyone support the DSP93 any more?
2. Do I need to update my old box in any way. New EPROMS?
3. Can it be used to decode AO40 telem or Rudak?
Thanks for the response Dick. The only one so far.

At 07:08 PM 05/25/2001, you wrote:
>There are some of us on it David. 73 de Dick W5SNX in EM73 Stone Mountain GA
>
>----- Original Message -----
>From: David Medley <d.j.medley@att.net>
>To: TAPR DSP Special Interest Group <dsp@lists.tapr.org>
>Sent: Saturday, May 26, 2001 02:01
>Subject: [dsp] Anybody there?
>
>
> > I joined this list again a few days ago but have seen no activity. Is this
> > list dead or what?
> > Regards
> > Dave KI6QE/5
> >
> > end
> >
> > Regards
> > David Medley

> > 1305 Rockmoor Drive
> > Edgecliff Village TX 76134
> > These radios are used daily here for short wave listening. They are not
>for
> > sale.
> > R-390A with Kleronomos Audio and solid state current reg.
> > R-391 with fully operational autotune.
> > AR-88 LF in beautiful condition.
> >
> > For parts and information re R-390 radios please check my Web Page at:
> > <http://home.att.net/~d.j.medley>
> >
> >
> > ---
> > You are currently subscribed to dsp as: w5snx@atl.mediaone.net
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
>
>
>---
>You are currently subscribed to dsp as: d.j.medley@att.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

end

Regards
David Medley
1305 Rockmoor Drive
Edgecliff Village TX 76134
These radios are used daily here for short wave listening. They are not for
sale.
R-390A with Kleronomos Audio and solid state current reg.
R-391 with fully operational autotune.
AR-88 LF in beautiful condition.

For parts and information re R-390 radios please check my Web Page at:
<http://home.att.net/~d.j.medley>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] 56002EVM Card Availability

From: "David Warwick" <dwarwick@email.msn.com>
Date: Wed, 30 May 2001 20:22:49 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-15656-2001.05.30-14.44.02--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

I am interested in experimenting with a DSP 56002EVM card, however, most or
the regular suppliers seem to no longer stock this item. Does anyone know
if these boards are still available or have one they no longer use which
they are willing to sell?

Thanks,

Dave G4EEV

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: 56002EVM Card Availability

From: "Viktor Dvorak" <dvorakvik@volny.cz>
Date: Wed, 30 May 2001 23:03:28 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-15673-2001.05.30-16.13.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have two 56002EVM Cards, Flash proms, Literature, end a lot of things for
easy starting.
If you wish I can sell it to you. Write me what you need. I have changed my
experimentation to ADSP2181 DSP.

Viktor Dvorak

dvorakvik@volny.cz

----- Original Message -----
From: "David Warwick" <dwarwick@email.msn.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Wednesday, May 30, 2001 9:22 PM
Subject: [dsp] 56002EVM Card Availability

>
>
> Hi,
>
> I am interested in experimenting with a DSP 56002EVM card, however, most
or
> the regular suppliers seem to no longer stock this item. Does anyone know
> if these boards are still available or have one they no longer use which
> they are willing to sell?
>
> Thanks,
>
> Dave G4EEV
>
>
> ---
> You are currently subscribed to dsp as: DVORAKV@BEBA.CESNET.CZ
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

June 2001

Original source file: dsp.0106
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0106

1. [dsp] Wanted: Suggestions for 27C burner

From: "TinyHoffman" <TinyHoffman@email.msn.com>
Date: Tue, 5 Jun 2001 14:44:04 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-16868-2001.06.05-14.03.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have access to a plethora of 27C512 ICs, however
I am lost on where to start to look for a good,
cheap (i.e. KIT), flexible burner.

Where would I start on that one?

Thank you in advance,
-Chris Hoffman
KO3GA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: Wanted: Suggestions for 27C burner

From: John Ackermann <jra@febo.com>
Date: Tue, 05 Jun 2001 14:53:13 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-16870-2001.06.05-14.12.51--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

X-Mailer: Mulberry/2.1.0a6 (Win32)
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

I don't know if they're still available, but Needham's Electronics made an
ISA-interface board and burner (I think the model number is PB-10) that
works very well for a reasonable price. The software is DOS-based, but
runs in an MS-DOS window without any problems. They didn't used to be on
the web, but I bet they are by now.

John N8UR
jra@febo.com

--On Tuesday, June 05, 2001 2:44 PM -0400 TinyHoffman
<TinyHoffman@email.msn.com> wrote:

>
> I have access to a plethora of 27C512 ICs, however
> I am lost on where to start to look for a good,
> cheap (i.e. KIT), flexible burner.
>
> Where would I start on that one?
>
> Thank you in advance,
> -Chris Hoffman
> KO3GA
>
> ---
> You are currently subscribed to dsp as: jra@febo.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Eprom burners

From: mark@catolico.com.br
Date: Wed, 6 Jun 2001 09:09:18 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-17019-2001.06.06-07.27.43--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Take a look :

http://www.zws.com/products/index.html

On 6 Jun 2001, at 0:00, TAPR DSP Special Interest Group digest wrote:

> Subject: Wanted: Suggestions for 27C burner
> From: "TinyHoffman" <TinyHoffman@email.msn.com>
> Date: Tue, 5 Jun 2001 14:44:04 -0400
> X-Message-Number: 1
>
> I have access to a plethora of 27C512 ICs, however
> I am lost on where to start to look for a good,
> cheap (i.e. KIT), flexible burner.
>
> Where would I start on that one?
>
> Thank you in advance,
> -Chris Hoffman
> KO3GA
>

73, Marcelo - PY3SS
http://py3ss.cjb.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: Wanted: Suggestions for 27C burner

From: Brian D Heaton <bdheaton@c4i2.com>
Date: Wed, 6 Jun 2001 12:54:18 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-17095-2001.06.06-14.15.34--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Take a look on Epay. They come up quite often. Most recently I saw a
whole pile of Needhams units. Unfortunately the seller appeared convinced
they were platinum plated.

THX/BDH

--
===
Brian D Heaton | I fear that we have awakened
Principal Consultant | a sleeping giant and instilled
C4I2.com System Consultants | in him a terrible resolve.
bdheaton@c4i2.com | -- Admiral Isoruku Yamamoto
USA (719) 623-0381 | -- Imperial Japanese Navy
UK +44 (0)845 127-5400 | -- December 7, 1941

On 2001.06.05 12:44 TinyHoffman wrote:
>
> I have access to a plethora of 27C512 ICs, however
> I am lost on where to start to look for a good,
> cheap (i.e. KIT), flexible burner.
>
> Where would I start on that one?
>
> Thank you in advance,
> -Chris Hoffman
> KO3GA
>
> ---
> You are currently subscribed to dsp as: bdheaton@c4i2.com

> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

July 2001

Original source file: dsp.0107
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0107

1. [dsp] Odd filter

From: Donald E Haselwood <dhaselwood@ij.net>
Date: Sat, 30 Jun 2001 22:17:10 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-21613-2001.07.01-14.02.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Can the following circuit be made to do some filtering?

A serial stream of data (unspecified) feeds into a shift register. The outputs of the shift register, e.g. 8 bits, feed the address into a ROM (e.g. 256 byte). The output data is a filtered version of the input data (the ROM values somehow chosen to do this).

Four of us meet for breakfast every Sat AM and talk about tech stuff. One of the group had heard about the above scheme. None of us could find anything in our text books, however I have *vague* recollection of seeing something along these lines (I think the data stream was from a delta, or delta-sigma, A/D converter). Has anybody run across this? Have any references?

It seems to me--the shift register could be viewed as a stages of a FIR filter, but just 1 bit samples, and the ROM could be viewed as an lookup table for the all combinations of coefficients.

73's
Don, W4DH

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: Odd filter

From: "Johann Lochner" <lochner@ing.sun.ac.za>
Date: Sun, 1 Jul 2001 23:27:49 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-21638-2001.07.01-16.49.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Donald,

On Sat, 30 Jun 2001 22:17:10 -0400, you asked:

> Can the following circuit be made to do some filtering?
>
> A serial stream of data (unspecified) feeds into a shift register.
> The outputs of the shift register, e.g. 8 bits, feed the address
> into a ROM (e.g. 256 byte). The output data is a filtered version
> of the input data (the ROM values somehow chosen to do this).
>
> Four of us meet for breakfast every Sat AM and talk about tech
> stuff. One of the group had heard about the above scheme. None of
> us could find anything in our text books, however I have *vague*
> recollection of seeing something along these lines (I think the
> data stream was from a delta, or delta-sigma, A/D converter). Has
> anybody run across this? Have any references?

This scheme is used to implement the modulator of the original G3RUH 9k6 modem. See <ftp://ftp.amsat.org/amsat/articles/g3ruh/a109.zip> for the schematics (FIG01C.GIF contains the relevant portion of the circuit). As used here, the circuit also up-samples the data stream, shifting base-band copies in the digital domain upwards in frequency (thus lowering the filter requirements after the DAC).

73 de ZR1CBC, Johann.

+---+
JG Lochner ESL, Universiteit van Stellenbosch
e-pos: lochner@ing.sun.ac.za

```
  webtuiste:  http://esl.ee.sun.ac.za/~lochner
+-----------------------------------------------+

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

3. [dsp] RE: Odd filter <LYR8831-21613-2001.07.01-14.02.19--norman#pcseng.com@lists.tapr.org>

From: Norman Gillaspie <norman@pcseng.com>
Date: Sat, 30 Jun 2001 19:56:39 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-21674-2001.07.01-22.09.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

```
Hi,
I think that was kind of a standard filtering
technique that was used in Granger Transmuxes.

This was a device that took in groups of FDM 4Khz SSB
analog voice channels and converted them to PCM T-1 and DS-3
digital signals.

I know I have some papers somewhere that showed using proms
and memory to do the filtering. There was of course an
A/D or D/A depending upon whther you were changing from a
FDM signal to a TDM signal.

This eliminated having to demodulate each of the SSB signals
and feed them to an A/D and turm them into a PCM signal. There
were of course 100's of channels.

Norman

-----Original Message-----
From: bounce-dsp-8831@lists.tapr.org
[mailto:bounce-dsp-8831@lists.tapr.org]On Behalf Of Donald E Haselwood
Sent: Saturday, June 30, 2001 7:17 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Odd filter


Can the following circuit be made to do some filtering?

A serial stream of data (unspecified) feeds into a shift register.  The
outputs of the shift register, e.g. 8 bits, feed the address into a ROM
(e.g. 256 byte).  The output data is a filtered version of the input data
(the ROM values somehow chosen to do this).

Four of us meet for breakfast every Sat AM and talk about tech stuff.  One
of the group had heard about the above scheme.  None of us could find
anything in our text books, however I have *vague* recollection of seeing
something along these lines (I think the data stream was from a delta, or
delta-sigma, A/D converter).  Has anybody run across this?   Have any
references?

It seems to me--the shift register could be viewed as a stages of a FIR
filter, but just 1 bit samples, and the ROM could be viewed as an lookup
table for the all combinations of coefficients.

73's
Don, W4DH




---
You are currently subscribed to dsp as: norman@pcseng.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org


---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

4. [dsp] TAPR Offices Moving; Short Closure and New Phone Numbers

From: "John R. Ackermann" <jra@febo.com>
Date: Wed, 04 Jul 2001 18:25:44 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-22222-2001.07.04-17.49.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The TAPR offices will be moving a few miles from Denton to Richardson,
Texas. We'll be closing on July 26 for the move and re-opening on August
6. The Tucson mailing address will remain the same (it is a maildrop that
forwards to the real office address) but the phone numbers will change.
Effective August 6, they will be:

Voice: 972-671-TAPR (8277)
FAX: 972-671-8716

The office email address -- tapr@tapr.org -- will not change.

The move is occurring because Dorothy Jones, KA5DWR, our longtime Office
Manager, has decided to take a well-earned retirement. It would take a lot
of words to fully describe how much Dorothy has done for TAPR, and how much
we've all relied on her over the years, so I'll just say "Thanks!"

Our new office manager is Laura Koster (XYL of Board member John Koster,
W9DDD). Laura had a baptism of fire by handling the TAPR booth at the
Dayton Hamvention this year, and she did a great job. We're very happy to
have her on board, and we're sure that she will carry on Dorothy's goal of
providing great service to our members.

73,
John Ackermann   N8UR
President, TAPR
jra@febo.com -- n8ur@tapr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] HP 10544A Osc

From: Mike73@aol.com
Date: Sun, 29 Jul 2001 11:46:59 EDT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-26770-2001.07.29-11.09.01--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Anyone using a HP 10544A osc for Brooks Shera's GPS Freq Standard? Would you
send me a note direct. I have a couple of questions regarding its operation.
I think I have an oven problem..... Tnx in advance.

73,
Mike, N1JEZ
FN34im
"A closed mouth gathers no feet."

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Windows "ME"

From: "Pat McGrath" <pat_mcgrath@yahoo.com>
Date: Sun, 29 Jul 2001 14:39:34 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-26785-2001.07.29-17.01.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Is anyone using the DSP56002EVM under Windows ME?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

August 2001

Original source file: dsp.0108
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0108

1. [dsp] RE: HP 10544A Osc

From: "W3SZ R Rehr" <r1ehr2@epix.net>
Date: Sat, 4 Aug 2001 08:11:19 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-27872-2001.08.04-07.33.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

HI, Mike!

I am using Brooks' standard with a 10544A that is still in a 5328A standard.
I just got your email today as I was on holiday.

I am not very technically inclined, but might be able to be of some help ;)

Also, I found Brooks to be a lot of help when I was having problems getting
things working. My problems here were solved by putting an isolation/buffer
amp between the 10544A and the GPS standard. I had to do thins because I
had problems with the waveform coming out of the 10544a, but I am not sure
why this occurred.

73,

Roger Rehr
W3SZ ex AA3QK, WA3JYM FN20ah
2 Merrymount Road
Reading, PA 19609-1718
http://www.qsl.net/w3sz

> -----Original Message-----
> From: bounce-dsp-22973@lists.tapr.org
> [mailto:bounce-dsp-22973@lists.tapr.org]On Behalf Of Mike73@aol.com
> Sent: Sunday, July 29, 2001 11:47 AM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] HP 10544A Osc
>
>
> Anyone using a HP 10544A osc for Brooks Shera's GPS Freq
> Standard? Would you
> send me a note direct. I have a couple of questions regarding
> its operation.
> I think I have an oven problem..... Tnx in advance.
>
> 73,
> Mike, N1JEZ
> FN34im
> "A closed mouth gathers no feet."
>
> ---
> You are currently subscribed to dsp as: r1ehr2@epix.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] C compiler for EVM56002

From: "Myszka, Mike" <mmyszka@hiwaay.net>
Date: Sun, 26 Aug 2001 22:52:08 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-32361-2001.08.26-23.15.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Is there a C compile available for the EVM56002?

thanks,
Mike

You are currently subscribed to dsp as: lyris.dsp@tapr.org

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: C compiler for EVM56002

From: Douglas Braun NA1DB <doug@dougbraun.com>
Date: Sun, 26 Aug 2001 21:05:40 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-32370-2001.08.26-23.29.06--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

There is a GNU-based C compiler that Motorola released.
But it is not all that useful, since there were no language
constructs to support the 56000 features like fractional
arithmetic and modulo addressing. Look at
my EVM page at www.dougbraun.com for some hints on
getting and using it.

Several years ago, when I had a surplus of time, I wrote
a library package to allot its code to be Leonid-compatible,
and I ported a couple of Viterbi decoding routines to it.

Doug

At 08:52 PM 8/26/01 , you wrote:
>Is there a C compile available for the EVM56002?
>
>thanks,
>Mike
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] RE: C compiler for EVM56002

From: "Christopher R. Hoffman" <tinyhoffman@earthlink.net>
Date: Mon, 27 Aug 2001 00:09:42 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-32372-2001.08.26-23.31.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Are you looking for open-source or pay-for-play compilers?

What is the OS you plan to use?

-Chris
KO3GA

> -----Original Message-----
> From: bounce-dsp-23533@lists.tapr.org
> [mailto:bounce-dsp-23533@lists.tapr.org]On Behalf Of Myszka, Mike
> Sent: Sunday, August 26, 2001 23:52
> To: TAPR DSP Special Interest Group
> Subject: [dsp] C compiler for EVM56002
>
>
> Is there a C compile available for the EVM56002?
>
> thanks,
> Mike
>
> ---
> You are currently subscribed to dsp as: TinyHoffman@email.msn.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] 2001 ARRL/TAPR DCC September 21-23, 2001

From: "Steven Bible" <n7hpr@tapr.org>
Date: Mon, 27 Aug 2001 23:03:57 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-32730-2001.08.28-01.23.41--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

2001 ARRL/TAPR Digital Communications Conference
Cincinnati, Ohio
September 21-23, 2001

- -
Hurry! Conference Room Rates end September 1st!
- -

DCC Schedule Highlights:

Friday
All Day APRS Seminar

Saturday
Technical Papers and Introductory Sessions
Banquet Speaker and Prize Drawing

Sunday - 5 Hour Seminar:
"Simulating Circuits and Systems with Serenade SV"
by Dave Newkirk, W9VES

- -

The 20th ARRL and TAPR Digital Communications Conference will be held September 21-23 in Cincinnati, Ohio. The annual gathering provides an international forum for radio amateurs involved in digital communication, networking, and related technologies to meet, publish their work, and present new ideas and techniques for discussion.

The DCC is for technically oriented amateurs of all experience levels to exchange ideas and learn about recent hardware and software advances, theories, experimental results, and practical applications.

Sessions at the beginner, intermediate, and advanced levels will be offered in selected areas of digital communication. Topics include APRS, satellite communication, TCP/IP, digital radio, spread spectrum and other introductory topics. Two symposia/seminars will be held which allow those with additional time and interest to make the most of the conference. For those who may have interest in just one symposium or seminar, registration for the conference is not required to attend these activities.

The DCC banquet is Saturday night. A guest speaker will speak after the banquet and a prize drawing will top the evening. The Sunday morning seminar topic has not yet been announced.

This year's fifth annual Automated Position Reporting System (APRS) National Symposium will be an all-day Friday event moderated by Steve Dimse, K4HG--the developer of javAPRS and www.findu.com. Possible attendees include APRS software authors such as Bob Bruninga, WB4APR--the father of APRS--Keith Sproul, WU2Z, and Mark Sproul, KB2ICI--the developers of MacAPRS and WinAPRS--Brent Hildebrand, KH2Z--the developer of APRSPLUS, Mike Musick, N0QBF--developer of PocketAPRS--and other nationally known APRS leaders. This session will include in-depth discussions and presentations on the status and future of APRS. It's a unique opportunity to gain insight into this fast-paced aspect of digital operation that combines computers, packet radio and GPS.

Local co-hosts for the 2001 ARRL and TAPR DCC are
Greater Cinti Amateur Radio Assn. http://w3.one.net/~rkuns/gcara.html
DIAL Radio Club http://www.qsl.net/w8blv/Miami
Valley FM Association http://www.mvfma.org/Southwest
Ohio Digital Symposium http://w3.one.net/~rkuns/swohdigi.html

Conference presentations, meetings, and seminars will be held at the Holiday Inn Cincinnati--Airport and Conference Center <http://www.basshotels.com/hotels/cvgap>; 859-371-2233. A special DCC room rate of $89/single and $89/double per night has been blocked for 50 rooms and is available until September 1. Once the 50 rooms have been reserved, room rates will increase. The hotel provides transportation to and from the Cincinnati/Northern Kentucky International Airport.

Full information, a registration form, and hotel information also may be obtained by contacting Tucson Amateur Packet Radio, 972-671-TAPR (8277); fax 972-671-8716; e-mail: tapr@tapr.org.

Conference registration includes the conference Proceedings, sessions,
meetings, and lunch on Saturday. Registrations received before September 1
are $45. After September 1 or at the door, registration is $55. The banquet
is $30. The APRS National Symposium on Friday is $25. The Sunday seminar is
$20.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] EVM radio interface

From: "Malcolm Macleod" <email4malcolm@yahoo.com>
Date: Thu, 30 Aug 2001 4:17:20
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-33233-2001.08.30-04.40.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I'm using a DSP-EVM from Texas Instruments, the C5402DSK.
I want to generate an ss radio signal in the DSP, emit
thru a 1-2MSPS DAC and then convert to a radio frequency
(and reverse in the receiver). TI has some DAC/ADC-EVM's
in this range.

Do you have or know of a radio interface board I can
use. Ultimately I want to build a 900MHz FHSS device
but without a workshop I'll need existing parts where
possible.

Or would it be much easier just to convert over to the
Motorola DSP used in your device ?.

Thanks,
Malcolm

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: EVM radio interface

From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
Date: Thu, 30 Aug 2001 08:23:52 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-33268-2001.08.30-10.47.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The Motorola 56002 EVM only does audio-frequency DAC and ADC
(48k sps max), so it probably couldn't work in your application.

Doug Braun
NA1DB

At 09:17 PM 8/29/01 , you wrote:
>I'm using a DSP-EVM from Texas Instruments, the C5402DSK.
>I want to generate an ss radio signal in the DSP, emit
>thru a 1-2MSPS DAC and then convert to a radio frequency
>(and reverse in the receiver). TI has some DAC/ADC-EVM's
>in this range.
>
>Do you have or know of a radio interface board I can
>use. Ultimately I want to build a 900MHz FHSS device
>but without a workshop I'll need existing parts where
>possible.
>
>Or would it be much easier just to convert over to the
>Motorola DSP used in your device ?.
>
>Thanks,
>Malcolm
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

September 2001

Original source file: dsp.0109
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0109

1. [dsp] RE: C compiler for EVM56002

From: "Myszka, Mike" <mmyszka@hiwaay.net>
Date: Sat, 1 Sep 2001 16:19:09 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-33731-2001.09.01-16.44.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> Are you looking for open-source or pay-for-play compilers?

Either

> What is the OS you plan to use?
Win 98 or Linux

Thanks,
Mike (KE4RNB)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] DCC: Last chance for registration discount, and updated program info

From: John Ackermann N8UR <jra@febo.com>
Date: Fri, 07 Sep 2001 12:50:15 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-34723-2001.09.07-12.14.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The early registration discount for both the hotel room rate, and the
registration fee, expires on September 10, so you only have a couple more
days to get your reservations and registration made at the lowest price.
Registrations at the normal price will be available and at the door (of
course, hotel rooms will be subject to availability).

The DCC begins on Friday, September 20 and runs through Sunday, September
22. Full details are available at
http://www.tapr.org/tapr/html/Fdccconf.html.

A couple of updates on the program:

1. We're very happy that Anthony R. Curtis, Ph.D, K3RXK, will be our
speaker at the DCC banquet. Tony's presentation will be titled "40 Years
of Amateur Radio In Space: Where We've Been, Where We Are, and Where We're
Going."

2. We've confirmed that the Packet Radio Users Group (PRUG) of Tokyo,
Japan will be sponsoring a reception and talking about their latest
activities Friday evening. PRUG is really on the cutting edge of digital
radio, and their presentations are always fascinating.

3. We are also fortunate to have three great activities that focus on the
hardware and soldering-iron side of amateur radio:

        * On Saturday, Jay Craswell, W0VNE, will do an introductory program on
using
        CirCAD, a powerful schematic drawing/PCB layout program that's available
(in a
        slightly limited form) for ham use at no cost.

        * Also on Saturday, Ten-Tec's Gary Barbour, AC4DL, will be talking about
Software
        Defined Radio development at Ten-Tec.

        * Our "Sunday Seminar" will feature Dave Newkirk, W9VES, providing a
tutorial
        on using the Serenade SV RF design software; this is another professional
package
        with a free version available for ham use.

We hope to see you there!

John N8UR
President, TAPR

jra@febo.com -- n8ur@tapr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: DCC: Last chance for registration discount, and updated program info

From: Bdale Garbee <bdale@gag.com>
Date: 07 Sep 2001 18:07:40 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-34803-2001.09.07-19.33.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

jra@febo.com (John Ackermann N8UR) writes:

> The DCC begins on Friday, September 20 and runs through Sunday, September 22.

Unfortunately, I won't be able to be there this year.

Who from PRUG are you expecting? I'm making a trip to Japan in mid October and
would love to catch up with some of the PRUG folks while I'm there... not sure
who is active these days?

Bdale

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Effective de-noise prg for AO-40

From: "Helmut Strickner" <hstr@gil.com.au>
Date: Sat, 8 Sep 2001 18:29:36 +1000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-34887-2001.09.08-03.53.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am a bit frustrated about the SSB noise when I am on AO-40 and I am sure
that I am not the only one suffering from noise fatigue after listening to
the satellite for a while.

I tried a number of programs so far, but the best results were with Pawel's
FFT-Cut program. I had been looking for soundcard as well as DSP560XX
solutions. I had not been able to experiment with any LMS based de-noising
program like the old DSP4 QRMQRN code.

Would anyone like to share his or her experience in this regard?

Although FFT-cut works very effectively I have a problem in implementing it
on the same platform with my other software, because I dont have enough
resources and MIPS left.

Your comments are welcome,

Helmut - VK4STR

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: Effective de-noise prg for AO-40

From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
Date: Sat, 08 Sep 2001 06:44:30 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-34890-2001.09.08-06.08.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have played with both fft-cut and Qrmqrn (years ago!), and I found that
fft-cut worked much better.

Doug
NA1DB

At 04:29 AM 9/8/01 , you wrote:
>I am a bit frustrated about the SSB noise when I am on AO-40 and I am sure
>that I am not the only one suffering from noise fatigue after listening to
>the satellite for a while.

>
>I tried a number of programs so far, but the best results were with Pawel's
>FFT-Cut program. I had been looking for soundcard as well as DSP560XX
>solutions. I had not been able to experiment with any LMS based de-noising
>program like the old DSP4 QRMQRN code.
>
>Would anyone like to share his or her experience in this regard?
>
>Although FFT-cut works very effectively I have a problem in implementing it
>on the same platform with my other software, because I dont have enough
>resources and MIPS left.
>
>Your comments are welcome,
>
>Helmut - VK4STR
>
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: Effective de-noise prg for AO-40

From: "Pat McGrath" <pat_mcgrath@yahoo.com>
Date: Sat, 8 Sep 2001 09:18:02 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-34925-2001.09.08-11.41.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Where is FFT-Cut available?

> >I tried a number of programs so far, but the best results were with
Pawel's
> >FFT-Cut program.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Correction to DCC Post

From: "John R. Ackermann" <jra@febo.com>
Date: Sat, 08 Sep 2001 20:22:57 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: mvarbb@febo.com, tawg-list@tawg.org
Message-ID: <LYR3532-34973-2001.09.08-19.46.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

In a previous email I incorrectly stated that the Circad schematic drawing
and PCB layout program is available for Ham use at no cost. I
misunderstood the relationship of the various versions.

There is a highly discounted version of the $995 Circad program available
at $295.   This $295 version is available to Licensed Ham/Amateur Radio
Operators only. Check out http://dover.5u.com/ for more info on the Ham
Discount.

There is a demo version of Circad downloadable at http://www.holophase.com;
although that version can be used to draw small schematics and PCBs, it's
not a replacement for the full program.

I want to apologize to Holophase and to Jay Craswell for improperly
describing the versions of Circad, and to you for any confusion this may
have caused.

73,
John N8UR
President, TAPR
jra@febo.com -- n8ur@tapr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: Effective de-noise prg for AO-40

From: "Larry Kayser" <kayser@sympatico.ca>
Date: Sat, 8 Sep 2001 21:28:09 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-35004-2001.09.08-20.52.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> Helmut - VK4STR

Greetings. I have been trying to use some of these denoising systems for a while and I find them excellent for the first few minutes then I seem to just turn them off. I find it far better to reduce the RF gain to stall any AGC action and then to ensure that I keep the internal noise down.

Here I am a CW operator and mostly now avoid the SSB side as much as I can, I don't find much of interest there for me but when I do I seem to find the denoising process causes so much distortion I would just as soon not have it.

Larry
VA3LK

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: Effective de-noise prg for AO-40

From: Donald E Haselwood <dhaselwood@ij.net>
Date: Sat, 08 Sep 2001 22:30:52 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-35014-2001.09.08-21.56.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Helmut,

Sometime back I used a Timewave DSP for AO-10 and AO-13, ssb. I found for "casual listening," i.e. not paying attention to what was being said, the apparent signal to noise was improved, but when listening closely, I found the "readability," my ability to perceive what was being said, did not improve and might have even degraded. Old age is beginning to takes its toll on my hearing so younger ears might get different results.

Don, W4DH

PS: We moved so the sat station still sits in boxes. I haven't worked AO-40, but I expect about the same results as far as dsp moise suppression on ssb is concerned.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: Effective de-noise prg for AO-40

From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
Date: Sat, 08 Sep 2001 23:31:02 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-35019-2001.09.08-22.55.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

You can grab a copy at:

http://www.dougbraun.com/software/fft-cut.asm

I have not run it in ages. You may have to tweak some I/O ports, L/R channel assignments, gains, etc. for your actual hardware setup.

Doug
NA1DB

At 12:18 PM 9/8/01 , you wrote:
>Where is FFT-Cut available?

>
>
> > >I tried a number of programs so far, but the best results were with
>Pawel's
> > >FFT-Cut program.
>
>
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Cheap DSP "chip" ?

From: mark@catolico.com.br
Date: Sun, 9 Sep 2001 13:25:00 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-35132-2001.09.09-11.46.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

I would like to start experimenting with audio DSP filters.

What is the cheapest IC or chipset to begin with ?
Texas, Analog Devices ?

It would be possible to design something with a Texas TLC320
front-end and an Atmel AVR uP ?

Thanks for your comments.

Marcelo Puhl
mark@catolico.com.br
http://py3ss.cjb.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] RE: [DSP] Cheap DSP "chip" ?

From: "Christopher Faust" <aderd@attglobal.net>
Date: Sun, 9 Sep 2001 13:39:26 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-35137-2001.09.09-12.58.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi

When looking at DSP programming and chip selection (i.e. cost), you must
keep a few factors in mind.

1- Time - what assemblers are you familiar with?
- what DSP architectures are you familiar with?
- What is the time-line for your project?
- How many hours do you have allotted for 1- hardware design
, layout and
prototyping 2- software programming?
2- Is this for a commercial, in-house or hobbyist application?
3- Is this a standalone system or do you plan to put it in another
system (ex a PC
class machine?)
4- Financial - What is your budget?
5- What are your expectations upon completion?

The above are just a few questions that I would suggest you think of.

A DSP design is a very good approach if you have a good mathematical and
filter background (i.e. in respect to the mathematics of the analog and
digital filter transfer functions) to be able to take advantage of any DSP
chips architecture and instruction set. Is there going to be any pre
conditioning before the DSP?

I would suggest first priming yourself on the transfer functions of interest and understanding the architecture and instruction set differences between DSP chips. Once you have this understanding you may want to think about fidelity, total harmonic distortion, the A/D and D/A approach (r2r, sigma delta, etc.), your analog or digital (MP3, etc.) front end, output (what load or loads will you be driving 4,8 16 ohms at how many watts RMS)

The above paragraph is incomplete, and is just meant as a start, otherwise you may be driving a Ferrari as most people drive an old 1931 Ford.

If done properly there is no need for a microprocessor or micro controller.

I hope this helps.

Christopher Faust

-----Original Message-----
From: bounce-dsp-24273@lists.tapr.org
[mailto:bounce-dsp-24273@lists.tapr.org]On Behalf Of
mark@catolico.com.br
Sent: Sunday, September 09, 2001 12:25 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Cheap DSP "chip" ?

Hi,

I would like to start experimenting with audio DSP filters.

What is the cheapest IC or chipset to begin with ?
Texas, Analog Devices ?

It would be possible to design something with a Texas TLC320
front-end and an Atmel AVR uP ?

Thanks for your comments.

Marcelo Puhl
mark@catolico.com.br
http://py3ss.cjb.net

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---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Questions

From: "Tomasz Szwelnik" <tomasz.szwelnik@gdansk.sprint.pl>
Date: Mon, 10 Sep 2001 13:38:00 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-35314-2001.09.10-07.03.01--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello !!!!!!!!!

Thanks for your advices.
I want also experiment with DSP.
I was familiar with DSP5600 architecture and asm56000 when
I had finished my studies. 4 years ago I was implementing
neural network on DSP56000. Now I want to recall some knowledge
about programming and DSP. I am looking some cheap
DSP to use it as a modem and implement compression alghoritms
like JPEG, ACELP, MP3 and others.

I know about DSP56002EVM. What do you think?
Is this sufficient equipment to implement such algorithm like
JPEG, modem .....and others.

How can I start? Where could I buy useful hardware.
Please help me and answer my questions?

Best wishes.
TOM.

-----Original Message-----
From: bounce-dsp-25751@lists.tapr.org
[mailto:bounce-dsp-25751@lists.tapr.org]On Behalf Of Christopher Faust
Sent: Sunday, September 09, 2001 7:39 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] RE: [DSP] Cheap DSP "chip" ?

Hi

When looking at DSP programming and chip selection (i.e. cost), you must keep a few factors in mind.

1- Time - what assemblers are you familiar with?
- what DSP architectures are you familiar with?
- What is the time-line for your project?
- How many hours do you have allotted for 1- hardware design, layout and prototyping 2- software programming?

2- Is this for a commercial, in-house or hobbyist application?
3- Is this a standalone system or do you plan to put it in another system (ex a PC class machine?)
4- Financial - What is your budget?
5- What are your expectations upon completion?

The above are just a few questions that I would suggest you think of.

A DSP design is a very good approach if you have a good mathematical and filter background (i.e. in respect to the mathematics of the analog and digital filter transfer functions) to be able to take advantage of any DSP chips architecture and instruction set. Is there going to be any pre conditioning before the DSP?

I would suggest first priming yourself on the transfer functions of interest and understanding the architecture and instruction set differences between DSP chips. Once you have this understanding you may want to think about fidelity, total harmonic distortion, the A/D and D/A approach (r2r, sigma delta, etc.), your analog or digital (MP3, etc.) front end, output (what load or loads will you be driving 4,8 16 ohms at how many watts RMS)

The above paragraph is incomplete, and is just meant as a start, otherwise you may be driving a Ferrari as most people drive an old 1931 Ford.

If done properly there is no need for a microprocessor or micro controller.

I hope this helps.

Christopher Faust

-----Original Message-----
From: bounce-dsp-24273@lists.tapr.org
[mailto:bounce-dsp-24273@lists.tapr.org]On Behalf Of
mark@catolico.com.br
Sent: Sunday, September 09, 2001 12:25 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Cheap DSP "chip" ?

Hi,

I would like to start experimenting with audio DSP filters.

What is the cheapest IC or chipset to begin with ?
Texas, Analog Devices ?

It would be possible to design something with a Texas TLC320
front-end and an Atmel AVR uP ?

Thanks for your comments.

Marcelo Puhl
mark@catolico.com.br
http://py3ss.cjb.net

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You are currently subscribed to dsp as: szwelas@gdansk.sprint.pl
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---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
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14. [dsp] Digital Communications Conference Still On

From: John Ackermann N8UR <jra@febo.com>
Date: Thu, 13 Sep 2001 17:24:05 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-35914-2001.09.13-16.49.59--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

With the tragic events of this week, we've had to seriously consider
whether it was still appropriate or feasible to hold the Digital
Communications Conference next weekend (Sept. 20-22) in Cincinnati.
Although we grieve with the whole world for the losses so many have
suffered, we believe it's important to show that terrorism will not succeed
in making us change our way of life.

So, the DCC will go on. We realize that in light of the circumstances,
some folks who have already registered may feel they cannot attend. If
that is the case, please contact the TAPR office (tapr@tapr.org) and we
will arrange a refund of your registration fee. If you are traveling to
the DCC, remember that things may still be somewhat disrupted next week,
and increased security precautions will certainly cause some airport
delays. Check with your airline early and often to make sure they haven't
changed your plans for you.

We realize that this year's DCC may well be smaller, and will certainly be
more somber, than in past years. But we think that going ahead is the
right thing to do, and we hope that you agree.

73,
John

John Ackermann N8UR jra@febo.com http://www.febo.com
President, TAPR n8ur@tapr.org http://www.tapr.org

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] Digital Communications Conference -- Final Update

From: "John R. Ackermann" <jra@febo.com>
Date: Tue, 18 Sep 2001 19:32:34 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-37014-2001.09.18-18.57.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Well, the Digital Communications Conference is only a few days away. If
you can make your way to Cincinnati, Ohio this weekend (Sept. 21-22) we
invite you to attend the show -- registration is available at the door.
Full details, including the current schedule, are available at
http://www.tapr.org/dcc.

Here's a brief rundown; note that due to the tragic events of last week,
we've had to make some adjustments to the schedule.

Friday:

Registration Opens 9:00AM

```
APRS Forum                                      1:00 - 6:00PM
                                                (The morning part of the Forum has been cancelled.)

PRUG Social                                     7:00PM
                                                (Come enjoy the hospitality and see the latest
activities
                                                of the Packet Radio Users Group of Tokyo, Japan.)

Saturday:

Registration Opens                      7:15AM

Main Program                            8:00AM - 5:00PM
                                                (There will be a mix of introductory sessions on new
                                                aspects of digital communication, as well as more
                                                advanced topics.  We think there'll be something
                                                for everyone.)

TAPR Membership Meeting                 5:00PM

Banquet                                         7:00PM
                                                (Anthony Curtis, K3RXK will speak on "40 Years of
Amateur
                                                Radio in Space.")

NOTE:   We've regretfully had to cancel the Sunday Seminar.  If you
registered for it, please stop at the registration area or contact TAPR to
arrange a refund.

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

16. [dsp] [OT] Cellular Modem ?

```
From: mark@catolico.com.br
Date: Thu, 20 Sep 2001 18:38:05 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-37394-2001.09.20-17.00.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

```
Hi,

I'm working on a project that needs an analog modem to connect to
a DAMPS Cellphone. I'm not allowed to use the internal phone modem.

Have tried the common modems, but they only works in the AMPS mode.

The best BER x SPEED I could reach was 50 bps with an AFSK modem like
the old RTTY ones. Even 300 bps didn't get thru ! I think the phone
codec and audio AGC(?) are messing up hardly with the modem signal.

My goal is something like 600 bps, as the system will be used on a
low traffic application.

I was thinking on a modem using eight or sixteen audio carriers, some
kind of OFDM with ASK modulation. Each audio carrier would be modulated
at 50 bps, so the final result would be 50 x 16 = 800 bps.

To do such modem, I guess I'll need a DSP processor. As the system needs
to be cheap, I'll have to use cheap DSP chips...

Have searched the Internet, but could find only high-speed OFDM designs.

I would like to read the opinions of the list members, before I start
exploring such idea.

Thanks.

73,  Marcelo - PY3SS


---
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```

17. [dsp] Re: [OT] Cellular Modem ?

```
From: Paul Williamson <kb5mu@amsat.org>
Date: Thu, 20 Sep 2001 17:58:08 -0700
```

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-37452-2001.09.20-20.23.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 06:38 PM 9/20/2001 -0300, you wrote:
>The best BER x SPEED I could reach was 50 bps with an AFSK modem like
>the old RTTY ones. Even 300 bps didn't get thru ! I think the phone
>codec and audio AGC(?) are messing up hardly with the modem signal.

That's about right. You're trying to push data through a voice-specific codec. These recent-generation low-rate digital voice codecs (vocoders) are VERY specific to the human voice and ear/brain. They use models of the human vocal tract (seen as a time-varying audio filter), and take advantage of the way the ear/brain hears only certain aspects of the audio.

>My goal is something like 600 bps, as the system will be used on a
>low traffic application.

I would be astounded if you can succeed in doing that.

>I was thinking on a modem using eight or sixteen audio carriers, some
>kind of OFDM with ASK modulation. Each audio carrier would be modulated
>at 50 bps, so the final result would be 50 x 16 = 800 bps.

I don't think that will work. The vocoder is built on the assumption that the excitation is a single vibrating vocal cord, which makes a sequence of pulses at one frequency. It won't understand multiple tones. Even touch-tones (DTMF, two frequencies) don't work very well through vocoders.

73 -Paul
kb5mu@amsat.org

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] Re: [OT] Cellular Modem ?

From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
Date: Fri, 21 Sep 2001 09:32:55 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-37654-2001.09.21-17.00.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

So I guess the ideal modem would be a text-to-speech program, coupled
with a voice recognition program at the far end. :-)

Doug
NA1DB

At 08:58 PM 9/20/01 , Paul Williamson wrote:

>That's about right. You're trying to push data through a voice-specific codec. These recent-generation low-rate digital voice codecs (vocoders) are VERY specific to the human voice and ear/brain. They use models of the human vocal tract (seen as a time-varying audio filter), and take advantage of the way the ear/brain hears only certain aspects of the audio.

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19. [dsp] Re: dsp digest: September 21, 2001

From: mark@catolico.com.br
Date: Sat, 22 Sep 2001 09:25:12 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-37761-2001.09.22-07.48.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

That's good :-))

On 22 Sep 2001, at 0:00, TAPR DSP Special Interest Group digest wrote:

> Subject: Re: [OT] Cellular Modem ?
> From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
> Date: Fri, 21 Sep 2001 09:32:55 -0400
> X-Message-Number: 1
>
> So I guess the ideal modem would be a text-to-speech program, coupled
> with a voice recognition program at the far end. :-)

>
> Doug
> NA1DB
>
> At 08:58 PM 9/20/01 , Paul Williamson wrote:
>
> >That's about right. You're trying to push data through a voice-specific codec. These recent-generation low-rate digital voice codecs (vocoders) are VERY specific to the human voice and ear/brain. They use models of the human vocal tract (seen as a time-varying audio filter), and take advantage
of the way the ear/brain hears only certain aspects of the audio.
>
>
>
>
> ---
>
> END OF DIGEST
>
> ---
> You are currently subscribed to dsp as: mark@catolico.com.br
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
73, Marcelo - PY3SS
http://py3ss.cjb.net

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October 2001

Original source file: dsp.0110
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0110

1. [dsp] DSP56009

From: "Tomasz Szwelnik" <tomasz.szwelnik@gdansk.sprint.pl>
Date: Tue, 2 Oct 2001 13:08:43 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-39806-2001.10.02-06.34.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello !!!!!!!!!

I want to ask where could I buy DSP56009 EVM?
How much money does it cost?
May be there are some e-buy shops in the net.

Thanks
TOM

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] RE: DSP56009

From: "Christopher Faust" <aderd@attglobal.net>
Date: Tue, 9 Oct 2001 23:44:46 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-41109-2001.10.09-23.05.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Ho Tom,

    I have been extemely busy. The best place to purchase the EVM is through
a distributer. Are you located in Canada or the United States? If you are
one distributer is Hamilton Halmark.

Christopher

Christopher Faust
-----Original Message-----
From: bounce-dsp-24273@lists.tapr.org
[mailto:bounce-dsp-24273@lists.tapr.org]On Behalf Of Tomasz Szwelnik
Sent: Tuesday, October 02, 2001 7:09 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] DSP56009

Hello !!!!!!!!!

I want to ask where could I buy DSP56009 EVM?
How much money does it cost?
May be there are some e-buy shops in the net.

Thanks
TOM

You are currently subscribed to dsp as: aderd@attglobal.net
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] DSP56002EVM with TAPR Radio Interface For Sale

From: "Myszka, Mike" <mmyszka@hiwaay.net>
Date: Tue, 16 Oct 2001 17:23:01 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-42027-2001.10.16-17.48.38--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

If anyone is interested, I have a DSP56002EVM with TAPR Radio Interface for sale. The price is $200, shipping included.

Thanks,
Mike (KE4RNB)

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: DSP56002EVM with TAPR Radio Interface For Sale

From: "Mark Bender" <mbender@ix.netcom.com>
Date: Thu, 18 Oct 2001 20:02:21 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-42360-2001.10.18-22.24.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Mike,

If no one has spoken up yet, I may be interested. I have not worked with the eval unit before, so if
it is still up for sale, please e-mail me at kd6not@amsat.org and let me know what you have.

Mark Bender
kd6not

----- Original Message -----
From: "Myszka, Mike" <mmyszka@hiwaay.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, October 16, 2001 3:23 PM
Subject: [dsp] DSP56002EVM with TAPR Radio Interface For Sale

> If anyone is interested, I have a DSP56002EVM with TAPR Radio Interface for
> sale. The price is $200, shipping included.
>
> Thanks,
> Mike (KE4RNB)
>
>
> ---
> You are currently subscribed to dsp as: mbender@ix.netcom.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] EVM56002 Radio Interface boards and Enclosure Kit For Sale

From: Kohjin Yamada <jr1ede@jcom.home.ne.jp>
Date: Fri, 19 Oct 2001 12:32:17 +0900
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-42362-2001.10.18-22.57.59--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have a TAPR Interface boards and Enclosure Kit for sale.
I bought it and just opened once but no need anymore.
$80.00 US with shipping.

Kohjin - JR1EDE

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] RE: EVM56002 Radio Interface boards and Enclosure Kit For Sale

From: "Tomasz Szwelnik" <tomasz.szwelnik@gdansk.sprint.pl>
Date: Fri, 19 Oct 2001 08:32:39 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-42384-2001.10.19-01.59.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello !!!!!!!

Could you sent more information about this TAPR Interface boards and
Enclosure Kit.

Best wishes
Tom

-----Original Message-----
From: bounce-dsp-25751@lists.tapr.org
[mailto:bounce-dsp-25751@lists.tapr.org]On Behalf Of Kohjin Yamada
Sent: Friday, October 19, 2001 5:32 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] EVM56002 Radio Interface boards and Enclosure Kit For Sale

I have a TAPR Interface boards and Enclosure Kit for sale.
I bought it and just opened once but no need anymore.
$80.00 US with shipping.

Kohjin - JR1EDE

You are currently subscribed to dsp as: tomasz.szwelnik@gdansk.sprint.pl
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: DSP56002EVM with TAPR Radio Interface For Sale

From: "Myszka, Mike" <mmyszka@hiwaay.net>
Date: Fri, 19 Oct 2001 10:34:16 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-42417-2001.10.19-11.00.02--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am sorry, but it has been sold. If they buyer changes their mid, I will
let you know.

Mike

> -----Original Message-----
> From: bounce-dsp-15875@lists.tapr.org
> [mailto:bounce-dsp-15875@lists.tapr.org]On Behalf Of Mark Bender
> Sent: Thursday, October 18, 2001 22:02 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] Re: DSP56002EVM with TAPR Radio Interface For Sale
>
>
> Mike,
>
> If no one has spoken up yet, I may be interested. I have not
> worked with the
> eval unit before, so if
> it is still up for sale, please e-mail me at kd6not@amsat.org and let me
> know what you have.
>
> Mark Bender
> kd6not
>
> ----- Original Message -----
> From: "Myszka, Mike" <mmyszka@hiwaay.net>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Tuesday, October 16, 2001 3:23 PM
> Subject: [dsp] DSP56002EVM with TAPR Radio Interface For Sale
>
>
> > If anyone is interested, I have a DSP56002EVM with TAPR Radio Interface
> for
> > sale. The price is $200, shipping included.
> >
> > Thanks,
> > Mike (KE4RNB)

> >
> >
> > ---
> > You are currently subscribed to dsp as: mbender@ix.netcom.com
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
>
>
> ---
> You are currently subscribed to dsp as: mmyszka@hiwaay.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: EVM56002 Radio Interface boards and Enclosure Kit For Sale

From: Quentin Conner <quentin@qns1.qns.net>
Date: Sun, 21 Oct 2001 20:53:51 -0500 (CDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-42774-2001.10.21-21.19.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Did you sell yet?

Is this the EVM *and* the TAPR kit? Or just the kit?

Thanks,

Quentin
--

On Fri, 19 Oct 2001, Kohjin Yamada wrote:

> I have a TAPR Interface boards and Enclosure Kit for sale.
> I bought it and just opened once but no need anymore.
> $80.00 US with shipping.
>
> Kohjin - JR1EDE
>
>
>
> ---
> You are currently subscribed to dsp as: quentin@qns.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

--
Quentin Conner
N5FX
mailto:quentin@qns.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: EVM56002 Radio Interface boards and Enclosure Kit For Sale

From: Kohjin Yamada <jr1ede@jcom.home.ne.jp>
Date: Tue, 23 Oct 2001 13:46:56 +0900
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-42986-2001.10.23-00.12.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

Sorry, it was sold out.

Kohjin - JR1EDE

At 12:32 01/10/19 +0900, you wrote:
>I have a TAPR Interface boards and Enclosure Kit for sale.
>I bought it and just opened once but no need anymore.
>$80.00 US with shipping.
>
>Kohjin - JR1EDE
>

>
>
>---
>You are currently subscribed to dsp as: jr1ede@jcom.home.ne.jp
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] DSP Start Kit for sale

From: Matthew Ettus <matt@ettus.com>
Date: Tue, 23 Oct 2001 22:05:05 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-43221-2001.10.24-01.27.07--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I've got a TI DSP starter kit, one of the 'C26 fixed point ones. Its
got audio in/out, and serial port. I've got all the docs, manuals, app
notes, etc.

If anyone's interested, let me know.
Matt
N2MJI

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

November 2001

Original source file: dsp.0111
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0111

1. [dsp] Re: DSP56002EVM with TAPR Radio Interface For Sale

From: "Juan Manuel" <jcorino@hotmail.com>
Date: Thu, 15 Nov 2001 12:33:44
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-46860-2001.11.15-13.00.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi, my name is Juan Manuel Corino (LW9DHU) from Buenos Aires, Argentine.

I□m interesed in the dsp56002evm with tapr radio interface. I can pay via
Western Union ?. Please informy is this is posibly as soon as posibble.

Juan Manuel

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

January 2002

Original source file: dsp.0201
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0201

1. [dsp] Re: Goofy question

From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
Date: Wed, 02 Jan 2002 16:47:03 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@lists.tapr.org
Message-ID: <LYR3532-54718-2002.01.02-17.32.18--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I can tell you of my experience working with the 56002 EVM board:

This board has NO analog AGC circuit, and I never missed it.
For the software I wrote, I simply set the Codec input gain
to a fixed value that made it impossible to overload the Codec.
Everything else related to managing the signal level happened in software.

You should keep in mind that a decent 16-bit CODEC has a MUCH greater
dynamic range and SNR than any other part of a ham radio's audio
circuitry. So even if the input to the CODEC is, say, 20dB below
the maximum level, there is still plenty of SNR and numerical precision
for the software to work.   Also note that the 56000 ALU works with
24-bit values, so there is an extra 8 bits of precision to prevent
rounding, etc. from degrading the SNR.

In fact, I have sometimes fed a modem program a signal 50 or 60 dB
below the correct value, and it still decoded perfectly!

All of this assumes that the decoding algorithm is level-independent
(which is not that hard to do), or there is a software scaling
routing on the input that performs the function of an AGC circuit.

In any case, it is good to have something in the software that
detects overload, and flashes a LED, etc. when it happens.
Remember that the input signal can be within the legal range,
but some intermediate math calculation in the algorithm could
still overflow. To avoid this, you may need to scale down
the input data, and check that filter coefficients, etc. do not
cause too much gain. Again, the 56000 ALU provides extra
high-order bits to help keep intermediate calculations
from overflowing.

I hope this is helpful.

Doug
NA1DB

At 04:00 PM 1/2/02 , you wrote:
>Doug,
>
>I am working on a DSP-2232 trying to set the analog AGC action correctly.
>Unfortunately, AEA went out of business before they could publish the
>procedure they had promised. It uses an NE572 compandoring chip to set the
>AGC threshold and gain feeding the 56K DSP chip.
>
>My problem is that I have complete ignorance of what the issues are in
>feeding a DSP chip, and especially from a constant output audio source in my
>rig, which has its own AGC. Setting the reference pot so it just provides
>maximum signal output to the Motorola DSP chip without compressing the
>signal gives a bit better result than the way it was shipped, and is
>consistent with some bits and pieces which I have heard over the years.
>However, I am basically flying blind. Fortunately, it does not seem to be
>very critical.
>
>Any suggestions, or references, which might set me off in the right
>direction?
>
>
>Alan
>WA4SCA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] evm56k-stand-alone?

From: "mario reinsch" <mario@haldolium.de>
Date: Wed, 16 Jan 2002 6:20:8
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57523-2002.01.16-06.49.59--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

hello out there...
i□m a student for technical physics in hamburg, germany. i□ll finish this
spring and my finishing project is to build an audio-syntheziser based on a
motorola evm56k dev.kit. the project is nearly finished, too, but what i
still don□t know is what exact steps are to be done to make the evm work as
a stand-alone-application, without the pc.
i have access to eprom-burner and anything else i□ll need, as far as i
know.
can anyone help me?
mario

mario@haldolium.de

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: evm56k-stand-alone?

From: Rob Frohne <frohro@wwc.edu>
Date: Wed, 16 Jan 2002 07:47:32 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57545-2002.01.16-10.17.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On 1/16/02 12:00 AM, "mario reinsch" <mario@haldolium.de> wrote:

> hello out there...
> i´m a student for technical physics in hamburg, germany. i´ll finish this
> spring and my finishing project is to build an audio-syntheziser based on a
> motorola evm56k dev.kit. the project is nearly finished, too, but what i
> still don´t know is what exact steps are to be done to make the evm work as
> a stand-alone-application, without the pc.
> i have access to eprom-burner and anything else i´ll need, as far as i
> know.
> can anyone help me?
> mario
>
> mario@haldolium.de
>
> ---
> You are currently subscribed to dsp as: FROHRO@WWC.EDU
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
Hi Mario,

You can do this pretty easily. Have a look at my QST article. It is at:

http://www.wwc.edu/~frohro/R2_DSP/R2_DSP.html

Best regards,

Rob

Sent using the Entourage X Test Drive.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: evm56k-stand-alone?

From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
Date: Wed, 16 Jan 2002 12:19:12 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57556-2002.01.16-11.54.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

If you have some EVM code that is already developed, you can burn it to
an EPROM. However, if you are continuing to develop the
code, it is much better to use the EEPROM chip that you can
re-program in place through the debugger interface.
(Unfortunately, the correct chips are getting a bit hard to find...)

Go get: http://www.dougbraun.com/software/evmco131.zip
and extract the file flshboot.asm

This file has some comments that explain how it is used.

Let me explain a little of how the 56002 loads code from a EPROM or EEPROM:

First of all, the 56002 does NOT directly execute code from the EPROM.
The code must be copied from the EPROM to the EVM's internal or external
memory. Three bytes of EPROM data must be copied and packed into one 24-bit
work of EVM memory.

The 56002 chip has a small bootstrap program hard-coded in ROM. Right after
reset, this program will copy part of the EPROM data to P memory and jump to it.
The program it loads first moves itself to a high, "out of the way" memory
address, and then loads the actual application program into P,X, and Y
memory. Finally, it jumps to the main program.

Flshboot.asm is designed to work with Leonid-based applications, so
it saves and restores several memory regions (explained in detail in flshboot.asm).
If you application already fits in these memory regions, you can use it as-is.
Otherwise you may have to hack flshboot.asm a bit so that it saves and restores
the correct memory areas.

Good luck,

Doug Braun
NA1DB

At 01:20 AM 1/16/02 , mario reinsch wrote:
>hello out there...
>i´m a student for technical physics in hamburg, germany. i´ll finish this
>spring and my finishing project is to build an audio-syntheziser based on a
>motorola evm56k dev.kit. the project is nearly finished, too, but what i
>still don´t know is what exact steps are to be done to make the evm work as
>a stand-alone-application, without the pc.
>i have access to eprom-burner and anything else i´ll need, as far as i
>know.
>can anyone help me?
>mario
>
>mario@haldolium.de
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: evm56k-stand-alone?

From: "Pat McGrath" <ka6tya@earthlink.net>
Date: Wed, 16 Jan 2002 13:28:01 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57589-2002.01.16-15.58.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

How do you stop or reduce the birdies that the DSP56002EVM produce?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: evm56k-stand-alone?

From: Mike W4LNA <w4lna@knology.net>
Date: Wed, 16 Jan 2002 18:50:33 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57627-2002.01.16-19.20.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Wednesday 16 January 2002 03:28 pm, you wrote:
> How do you stop or reduce the birdies that the DSP56002EVM produce?

Filter every wire going to or coming from the EVM. Sadly the TAPR kit didn't take this into account and it is almost as bad inside the box as it was outside of the box. The conducted emissions from the power connections are some of the worst. Bypass the signal lines with small capacitors (< 0.01 uF) to their respective grounds and put a common mode filter on the power lines. Bypassing the chassis back to digital ground may help some too.

Mike W4LNA

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] 56002 evm available

From: "Ken , VK7KRJ" <vk7krj@southcom.com.au>
Date: Thu, 17 Jan 2002 23:44:08 +1100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57684-2002.01.17-07.14.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi, I have given up trying to convince myself I will ever use my 56002evm so it is now up for offers. Never had power on it, only thing I did was to fit the atmel 29c256 eeprom (using full anti-static procedures of course). Complete in its original box with everything it came with.
I am located in Tasmania (Australia) but can send it anywhere in the world (for the right price of course!)

Cheers, Ken, vk7krj
vk7krj@southcom.com.au
www.southcom.com.au/~vk7krj
Hobart- 147.438E, 42.896S

Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.303 / Virus Database: 164 - Release Date: 2001/11/24

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: evm56k-stand-alone?

From: "Michael Hodges" <Mick@g4ope.demon.co.uk>
Date: Thu, 17 Jan 2002 20:58:42 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57751-2002.01.17-15.29.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Doug, the EEPROM code loads into program memory only. Any code that needs to be stored in x or y memory, (coefficients etc.), should be assembled into program memory and transferred into x or y memory by the program itself. This is how it works on the 56311 so correct me if I'm wrong.

Regards,

Mick
G4OPE

----- Original Message -----
From: "Douglas Braun & Nadia Papakonstantinou" <doug@dougbraun.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Wednesday, January 16, 2002 5:19 PM
Subject: [dsp] Re: evm56k-stand-alone?

If you have some EVM code that is already developed, you can burn it to

an EPROM. However, if you are continuing to develop the
code, it is much better to use the EEPROM chip that you can
re-program in place through the debugger interface.
(Unfortunately, the correct chips are getting a bit hard to find...)

Go get: http://www.dougbraun.com/software/evmco131.zip
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This file has some comments that explain how it is used.

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The 56002 chip has a small bootstrap program hard-coded in ROM. Right after
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it.
The program it loads first moves itself to a high, "out of the way" memory
address, and then loads the actual application program into P,X, and Y
memory. Finally, it jumps to the main program.

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flshboot.asm).
If you application already fits in these memory regions, you can use it
as-is.
Otherwise you may have to hack flshboot.asm a bit so that it saves and
restores
the correct memory areas.

Good luck,

Doug Braun
NA1DB

At 01:20 AM 1/16/02 , mario reinsch wrote:
>hello out there...
>i´m a student for technical physics in hamburg, germany. i´ll finish this
>spring and my finishing project is to build an audio-syntheziser based on a
>motorola evm56k dev.kit. the project is nearly finished, too, but what i
>still don´t know is what exact steps are to be done to make the evm work as
>a stand-alone-application, without the pc.
>i have access to eprom-burner and anything else i´ll need, as far as i
>know.
>can anyone help me?
>mario
>
>mario@haldolium.de
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: mick@g4ope.demon.co.uk
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: evm56k-stand-alone?

From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
Date: Thu, 17 Jan 2002 16:33:49 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57758-2002.01.17-16.04.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The boot program that is hardwired into the 56002 ROM loads
only into the P memory. But the second-level boot program
embedded in flshboot.asm copies more data from the EPROM into

P, X, and Y memory.

Doug
NA1DB

At 03:58 PM 1/17/02 , you wrote:
>Doug, the EEPROM code loads into program memory only. Any code that needs
>to be stored in x or y memory, (coefficients etc.), should be assembled into
>program memory and transferred into x or y memory by the program itself.
>This is how it works on the 56311 so correct me if I'm wrong.
>
>Regards,
>
>Mick
>G4OPE
>
>----- Original Message -----
>From: "Douglas Braun & Nadia Papakonstantinou" <doug@dougbraun.com>
>To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>Sent: Wednesday, January 16, 2002 5:19 PM
>Subject: [dsp] Re: evm56k-stand-alone?
>
>
>If you have some EVM code that is already developed, you can burn it to
>an EPROM. However, if you are continuing to develop the
>code, it is much better to use the EEPROM chip that you can
>re-program in place through the debugger interface.
>(Unfortunately, the correct chips are getting a bit hard to find...)
>
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>
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>
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>
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>work of EVM memory.
>
>The 56002 chip has a small bootstrap program hard-coded in ROM. Right after
>reset, this program will copy part of the EPROM data to P memory and jump to
>it.
>The program it loads first moves itself to a high, "out of the way" memory
>address, and then loads the actual application program into P,X, and Y
>memory. Finally, it jumps to the main program.
>
>Flshboot.asm is designed to work with Leonid-based applications, so
>it saves and restores several memory regions (explained in detail in
>flshboot.asm).
>If you application already fits in these memory regions, you can use it
>as-is.
>Otherwise you may have to hack flshboot.asm a bit so that it saves and
>restores
>the correct memory areas.
>
>Good luck,
>
>Doug Braun
>NA1DB
>
>
>
>At 01:20 AM 1/16/02 , mario reinsch wrote:
> >hello out there...
> >i´m a student for technical physics in hamburg, germany. i´ll finish this
> >spring and my finishing project is to build an audio-syntheziser based on a
> >motorola evm56k dev.kit. the project is nearly finished, too, but what i
> >still don´t know is what exact steps are to be done to make the evm work as
> >a stand-alone-application, without the pc.
> >i have access to eprom-burner and anything else i´ll need, as far as i
> >know.
> >can anyone help me?
> >mario
> >
> >mario@haldolium.de
> >
> >---

> >You are currently subscribed to dsp as: doug@dougbraun.com
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: mick@g4ope.demon.co.uk
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: evm56k-stand-alone?

From: "Michael Hodges" <Mick@g4ope.fsnet.co.uk>
Date: Thu, 17 Jan 2002 21:49:18 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-57759-2002.01.17-16.19.25--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

That makes more sense to me now, maybe I should take a look at
flashboot.asm.

Regards,

Mick
G4OPE

----- Original Message -----
From: "Douglas Braun & Nadia Papakonstantinou" <doug@dougbraun.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, January 17, 2002 9:33 PM
Subject: [dsp] Re: evm56k-stand-alone?

The boot program that is hardwired into the 56002 ROM loads
only into the P memory. But the second-level boot program
embedded in flshboot.asm copies more data from the EPROM into
P, X, and Y memory.

Doug
NA1DB

At 03:58 PM 1/17/02 , you wrote:
>Doug, the EEPROM code loads into program memory only. Any code that needs
>to be stored in x or y memory, (coefficients etc.), should be assembled
into
>program memory and transferred into x or y memory by the program itself.
>This is how it works on the 56311 so correct me if I'm wrong.
>
>Regards,
>
>Mick
>G4OPE
>
>----- Original Message -----
>From: "Douglas Braun & Nadia Papakonstantinou" <doug@dougbraun.com>
>To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
>Sent: Wednesday, January 16, 2002 5:19 PM
>Subject: [dsp] Re: evm56k-stand-alone?
>
>
>If you have some EVM code that is already developed, you can burn it to
>an EPROM. However, if you are continuing to develop the
>code, it is much better to use the EEPROM chip that you can
>re-program in place through the debugger interface.
>(Unfortunately, the correct chips are getting a bit hard to find...)
>
>Go get: http://www.dougbraun.com/software/evmco131.zip
>and extract the file flshboot.asm
>
>This file has some comments that explain how it is used.
>

>Let me explain a little of how the 56002 loads code from a EPROM or EEPROM:
>
>First of all, the 56002 does NOT directly execute code from the EPROM.
>The code must be copied from the EPROM to the EVM's internal or external
>memory. Three bytes of EPROM data must be copied and packed into one
24-bit
>work of EVM memory.
>
>The 56002 chip has a small bootstrap program hard-coded in ROM. Right
after
>reset, this program will copy part of the EPROM data to P memory and jump
to
>it.
>The program it loads first moves itself to a high, "out of the way" memory
>address, and then loads the actual application program into P,X, and Y
>memory. Finally, it jumps to the main program.
>
>Flshboot.asm is designed to work with Leonid-based applications, so
>it saves and restores several memory regions (explained in detail in
>flshboot.asm).
>If you application already fits in these memory regions, you can use it
>as-is.
>Otherwise you may have to hack flshboot.asm a bit so that it saves and
>restores
>the correct memory areas.
>
>Good luck,
>
>Doug Braun
>NA1DB
>
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>At 01:20 AM 1/16/02 , mario reinsch wrote:
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> >i´m a student for technical physics in hamburg, germany. i´ll finish this
> >spring and my finishing project is to build an audio-syntheziser based on
a
> >motorola evm56k dev.kit. the project is nearly finished, too, but what i
> >still don´t know is what exact steps are to be done to make the evm work
as
> >a stand-alone-application, without the pc.
> >i have access to eprom-burner and anything else i´ll need, as far as i
> >know.
> >can anyone help me?
> >mario
> >
> >mario@haldolium.de
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> >---
> >You are currently subscribed to dsp as: doug@dougbraun.com
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
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>---
>You are currently subscribed to dsp as: mick@g4ope.demon.co.uk
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: mick@g4ope.fsnet.co.uk
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: evm56k-stand-alone?

From: Mario Reinsch <Mario@Haldolium.de>
Date: Sun, 20 Jan 2002 13:35:30 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-58118-2002.01.20-07.07.02--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

sorry, what are birdies?

Pat McGrath schrieb:

> How do you stop or reduce the birdies that the DSP56002EVM produce?
>
> ---
> You are currently subscribed to dsp as: mario@haldolium.de
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: evm56k-stand-alone?

From: "Marius Hauki" <marius.hauki@datarespons.no>
Date: Mon, 21 Jan 2002 09:03:12 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-58241-2002.01.21-02.32.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

birdies are unwanted energy peaks that show up in the spectrum
around e.g. digital devices with square waveforms that has rapid attack
and decay.
The reason they are called birdies are probably that when you listen to
them with a SSB or CW receiver
they sound like a bird with a beep ing sound. Sometimes they are also
unstable (have an FM modulated
component) and then they sound even more like a bird chirping away.

73 de
LA9EEA
Marius

Mario Reinsch wrote:

> sorry, what are birdies?
>
>
>
>
> Pat McGrath schrieb:
>
>
>>How do you stop or reduce the birdies that the DSP56002EVM produce?
>>
>>---
>>You are currently subscribed to dsp as: mario@haldolium.de
>>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>>
>
>
> ---
> You are currently subscribed to dsp as: marius.hauki@datarespons.no
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

February 2002

Original source file: dsp.0202
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0202

1. [dsp] New PSR available on-line

From: "John R. Ackermann" <jra@febo.com>
Date: Sat, 16 Feb 2002 10:10:17 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-63410-2002.02.16-09.41.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The Winter, 2002 issue of TAPR's journal, The Packet Status Register, is now available on-line at http://www.tapr.org/tapr/html/Fpsr.html . Hope you enjoy it!

73,
John N8UR

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] SM2496 TNC/DSP Module Now Available

From: "Brian C. Lane" <kc7tyu@brianlane.com>
Date: Mon, 25 Feb 2002 20:21:40 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-65392-2002.02.25-22.56.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The DSP sig has been a bit slow lately, so I figured this would be of interest. The SM2496 is a Handspring Visor module with a TI DSP (5402 or 5416) and a 96kHz/24bit codec and stereo in and out connectors.

I am the lead programmer on the project. I think this would make a great DSP development platform for experimenting with new modes, etc.

We have a version available with JTAG connector and adapter board (for the XDS510 JTAG pods from TI and Spectrum digital).

We are also going to be at the Mike & Key Amateur Radio Club Electronics Show, March 9 at the Western Washington Fairgrounds in Puyallup, WA

Here's a copy of our press announcement:

$99 SM2496 TNC Modules Now Available from Shine Micro, Inc.

(PORT LUDLOW, WA, Feb.22, 2002) The Shine Micro SM2496-TNC module for the Handspring Visor is now available from www.SM2496.com . Due to the level of interest in the Amateur Radio TNC/APRS applications for the SM2496, Shine Micro, Inc. is releasing two non-MP3 module versions.

The SM2496 fits flush in the Springboard Expansion slot of the Visor, and will be a Springboard module when approved by Handspring.

The $99.00 SM2496-02 uses the
TMS320VC5402 100 MIPS DSP with 16K words of RAM. This represents the smallest, most powerful, programmable DSP module ever produced at this price. It is available for non-MP3 applications only.

The $199.00 SM2496-16M uses the TMS320VC5416 160 MIPS DSP with 128K words of RAM. This is the module that has been in Beta testing for both MP3 and TNC/modem applications. It is currently available as a TNC/modem only. An MP3 software upgrade will be available later in 2002.

Both modules use the high quality TLV320AIC23 24 bit 96 KHz codec from Texas Instruments, and limited quantities of each are immediately available at www.SM2496.com. Full production is scheduled later this year.

The SM2496-TNC is a totally open source platform. Schematics of the modules will be available online at www.shinemicro.com . All DSP and PalmOS source and executable code is also available online, along with starter applications and a software development kit. A JTAG interface version (with cable) is available for serious DSP developers.

The SM2496-MP3 and SM2496-MP3R versions are still in Beta testing and will be available later in 2002. Check out www.shinemicro.com for all of the details!

--
Brian C. Lane - Programmer, EET, KC7TYU   www.brianlane.com

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] FS: DSP56002 EVM and TAPR Radio Interface

From: Rickd73@aol.com
Date: Wed, 27 Feb 2002 19:47:51 EST
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-65745-2002.02.27-19.19.49--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

These have been sitting above my bench for a long time now and I don't expect
I will ever get around to them. So they are for sale. The boxes were opened
when they arrived to make sure they survived shipping, but haven't been
touched since. The TAPR interface is unbuilt. I prefer to sell both unts
together and will not consider selling the EVM alone as long as the TAPR
interface is unsold. Price for the pair is $230, including shipping CONUS.
Payment is to be made via USPO money order, preferably mailed in a way that
can be tracked. Tracking numbers will be provided by me when the units ship.

73- Rick, KY0Q

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

March 2002

Original source file: dsp.0203
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0203

1. [dsp] Viterbi decoder ?

From: "Marcelo" <mark@cpovo.net>
Date: Tue, 5 Mar 2002 10:07:00 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-66687-2002.03.05-07.39.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

I need to insert a Viterbi decoder routine (1/2, k=7) in a program.
Speed isn't a concern, as I will receive only 50 bits/minute.

Is there some PIC or ATMEL assembler code available anywhere ? I have
found nothing searching with Google.

Thanks.

Marcelo Puhl
mark@cpovo.net
http://py3ss.cjb.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: Viterbi decoder ?

From: "Michael J Huslig" <mhuslig@idir.net>
Date: Tue, 5 Mar 2002 09:47:33 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-66734-2002.03.05-10.14.21--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Analog Device's "Digital Signal Processing Applications Vol 2" has some
Viterbi code in the Modems chapter. I think you can download a copy from
their site.

----- Original Message -----
From: "Marcelo" <mark@cpovo.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, March 05, 2002 7:07 AM
Subject: [dsp] Viterbi decoder ?

> Hi,
> I need to insert a Viterbi decoder routine (1/2, k=7) in a program.
> Speed isn't a concern, as I will receive only 50 bits/minute.
> Is there some PIC or ATMEL assembler code available anywhere ? I have
> found nothing searching with Google.
> Thanks.
> ---
> Marcelo Puhl
> mark@cpovo.net
> http://py3ss.cjb.net
> ---
> You are currently subscribed to dsp as: mhuslig@idir.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Re: Viterbi decoder ?

From: "Antonino Porcino" <porcino@sysonline.it>
Date: Tue, 5 Mar 2002 17:52:36 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-66749-2002.03.05-11.25.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

>
> I need to insert a Viterbi decoder routine (1/2, k=7) in a program.
> Speed isn't a concern, as I will receive only 50 bits/minute.
>

Phil Karn's website has C source code for Viterbi and other decoders. There
are special optimized versions for R=1/2 and R=1/3 (K=7) too. I have
included it in my "Stream" (MFSK16) software for the soundcard and they work
stupendly.

Regards,

-Nino Porcino
IZ8BLY

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: Viterbi decoder ?

From: "Marcelo" <mark@cpovo.net>
Date: Wed, 6 Mar 2002 23:57:43 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67125-2002.03.06-21.29.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I got it. Thanks.

On 5 Mar 2002 at 9:47, Michael J Huslig wrote:

> Analog Device's "Digital Signal Processing Applications Vol 2" has some
> Viterbi code in the Modems chapter. I think you can download a copy from
> their site.
>
> ----- Original Message -----
> From: "Marcelo" <mark@cpovo.net>
> To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
> Sent: Tuesday, March 05, 2002 7:07 AM
> Subject: [dsp] Viterbi decoder ?
>
>
> >
> > Hi,
> >
> > I need to insert a Viterbi decoder routine (1/2, k=7) in a program.
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> >
> > Is there some PIC or ATMEL assembler code available anywhere ? I have
> > found nothing searching with Google.
> >
> > Thanks.
> > ---
> > Marcelo Puhl
> > mark@cpovo.net
> > http://py3ss.cjb.net
> >
> >
> > ---
> > You are currently subscribed to dsp as: mhuslig@idir.net
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >
>
>
> ---
> You are currently subscribed to dsp as: mark@cpovo.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

73, Marcelo - PY3SS
http://py3ss.cjb.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: Viterbi decoder ?

From: "Marcelo" <mark@cpovo.net>
Date: Wed, 6 Mar 2002 23:57:43 -0300
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67127-2002.03.06-21.29.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On 5 Mar 2002 at 17:52, Antonino Porcino wrote:

> >
> > I need to insert a Viterbi decoder routine (1/2, k=7) in a program.
> > Speed isn't a concern, as I will receive only 50 bits/minute.
> >
>
> Phil Karn's website has C source code for Viterbi and other decoders. There
> are special optimized versions for R=1/2 and R=1/3 (K=7) too. I have
> included it in my "Stream" (MFSK16) software for the soundcard and they work
> stupendly.
>
> Regards,
>
> -Nino Porcino
> IZ8BLY
>

Thanks for the tip. That code will be very useful.

73, Marcelo - PY3SS
http://py3ss.cjb.net

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] SM2496 SDK v1.11 Released

From: "Brian C. Lane" <kc7tyu@brianlane.com>
Date: Sat, 9 Mar 2002 20:17:15 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-67559-2002.03.09-22.55.54--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I released a new version of the SDK for the SM2496 yesterday. This may be of
some interest to you guys because it include the full GPL source for the
Visor programs (KISS Modem and APRS Beacon) and for the 1200bps and 9600bps
TI DSP modem software.

The DSP modem software is based on the Linux Soundmodem drivers by Thomas
Sailer.

The SDK can be found at http://www.shinemicro.com/SoftwarePage3.htm

Brian
(Lead Programmer for Shine Micro)

--
Brian C. Lane   - Programmer, EET, KC7TYU
www.brianlane.com
GPG Key Fingerprint   - 799F A3B6 AEF8 E9B4 D720
GPG and PGP email accepted   - 56D0 21FB 63FE 9712 C2CD

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] evm-56k / tapr kit wanted

From: christian void <cvoid@morphine.com>
Date: Fri, 15 Mar 2002 13:50:21 -0800 (PST)

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-68755-2002.03.15-16.22.53--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

a friend is wanting to put together an evm-56k-ri and is looking for
the dsp module, the kit, or a completed unit...

anyone selling? :)

thanks in advance.

--
christian void - cvoid@morphine.com
www.morphine.com/void/
gpg key available on request

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: evm-56k / tapr kit wanted

From: Paul Sadowski <sadowski@bellsouth.net>
Date: Sat, 23 Mar 2002 12:51:54 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-70370-2002.03.23-12.51.00--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Christian

I have three that are unused and available...

HOWEVER... all three must go... $200 for the three plus shipping....

Somewhere I have the TAPR case ... and when I find it... it too must
go...

ALOHA
AH6LS

christian void wrote:

> a friend is wanting to put together an evm-56k-ri and is looking for
> the dsp module, the kit, or a completed unit...
>
> anyone selling? :)
>
> christian void - cvoid@morphine.com
> www.morphine.com/void/

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] DSP56303EVM

From: "Carcia, Frank A.   HS" <francis.carcia@hs.utc.com>
Date: Thu, 28 Mar 2002 08:30:52 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71101-2002.03.28-08.04.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi All,
>   I'm new to the list and just purchased a DSP56303EVM. I drive a
> modified Racal RA6830 and plan a
>   marriage between the two soon.   73,
>
> Frank,WA1GFZ

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] FW: voice coding question...

From: "Tom Scott" <TomRScott@Sterlink.Net>
Date: Thu, 28 Mar 2002 23:06:13 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71303-2002.03.29-01.35.56--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

All,

I have been asked to prepare a brief overview presentation on DSP voice coding techniques for some co-workers and have been studying the field a bit and found quite a few good references, but one reference I've been unable to find is some reasonably comprehensive comparison of the various algorithms in terms of criteria like: compression ration, relative CPU overhead (by any measure even a subjective "low, medium, and high"), and then whether or not it is public domain or requires royalties. If you have any idea where I could find such information, it would be greatly appreciated.

Thanks!

-- Tom Scott
_/_/_/_/_/_/_/_/_/_/_/_/_/
27005 SW Neill Rd
Newberg, Oregon 97132
503-614-1223 - Work
503-330-6867 - Cell
503-538-5839 - Home
KD7DMH
_/_/_/_/_/_/_/_/_/_/_/_/_/
"The wireless telegraph is not difficult to understand.
The ordinary wired telegraph is like a very long cat.
You pull on the tail in New York, and it meows in Los Angeles.
The wireless is much the same, only without the cat."
- Albert Einstein

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: FW: voice coding question...

From: Ray Heasman <nurf@spamcop.net>
Date: 28 Mar 2002 23:57:52 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71308-2002.03.29-02.31.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Have a look on the Tarkin-Dev maillist on www.xiph.org. They are talking about voice coding right now.

Cheers,
Ray

On Thu, 2002-03-28 at 23:06, Tom Scott wrote:
> All,
>
> I have been asked to prepare a brief overview presentation on DSP voice
> coding techniques for some co-workers and have been studying the field a bit
> and found quite a few good references, but one reference I've been unable to
> find is some reasonably comprehensive comparison of the various algorithms
> in terms of criteria like: compression ration, relative CPU overhead (by any
> measure even a subjective "low, medium, and high"), and then whether or not
> it is public domain or requires royalties. If you have any idea where I
> could find such information, it would be greatly appreciated.
>
> Thanks!
>
>
> -- Tom Scott
> _/_/_/_/_/_/_/_/_/_/_/_/_/
> 27005 SW Neill Rd
> Newberg, Oregon 97132
> 503-614-1223 - Work
> 503-330-6867 - Cell
> 503-538-5839 - Home
> KD7DMH
> _/_/_/_/_/_/_/_/_/_/_/_/_/
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> The wireless is much the same, only without the cat."
> - Albert Einstein
>

>
>
> ---
> You are currently subscribed to dsp as: RAY@RUCUS.RU.AC.ZA
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

--
--
http://www.mythral.org/~ray/

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: FW: voice coding question...

From: mahaboob basha <basha_ram@yahoo.com>
Date: Fri, 29 Mar 2002 04:34:34 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71331-2002.03.29-07.07.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

hi , if u   need any explanation on voicecoding u refer to
http://www.analog.com/technology/dsp/training/materials/dsp_book_index.html. u'll find chapters , u go
through the these u'll find ur topic in any one of the chapter.
BASHA

Do You Yahoo!?
Yahoo! Greetings - send greetings for Easter, Passover

13. [dsp] Re: FW: voice coding question...

From: mahaboob basha <basha_ram@yahoo.com>
Date: Fri, 29 Mar 2002 04:36:36 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71333-2002.03.29-07.09.43--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

hi , if u   need any explanation on voicecoding u refer to
http://www.analog.com/technology/dsp/training/materials/dsp_book_index.html. u'll find chapters , u go
through the these u'll find ur topic in any one of the chapter.
BASHA

Do You Yahoo!?
Yahoo! Greetings - send greetings for Easter, Passover

14. [dsp] Re: FW: voice coding question...

From: mahaboob basha <basha_ram@yahoo.com>
Date: Fri, 29 Mar 2002 04:36:58 -0800 (PST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-71335-2002.03.29-07.10.05--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Ray Heasman <nurf@spamcop.net> wrote: Have a look on the Tarkin-Dev maillist on www.xiph.org. They are
talking
about voice coding right now.

Cheers,
Ray

On Thu, 2002-03-28 at 23:06, Tom Scott wrote:
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> in terms of criteria like: compression ration, relative CPU overhead (by any
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> The wireless is much the same, only without the cat."
> - Albert Einstein
>
>
>
> ---
> You are currently subscribed to dsp as: RAY@RUCUS.RU.AC.ZA
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

--
--
http://www.mythral.org/~ray/

You are currently subscribed to dsp as: basha_ram@yahoo.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

----
Do You Yahoo!?
Yahoo! Greetings - send greetings for Easter, Passover

April 2002

Original source file: dsp.0204
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0204

1. [dsp] 2002 Digital BASH at Dayton Hamvention

```
From: "John R. Ackermann" <jra@febo.com>
Date: Tue, 09 Apr 2002 18:17:11 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-73117-2002.04.09-17.51.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

Going to the Dayton Hamvention? Then plan to attend the annual Digital*BASH
sponsored by TAPR and the Miami Valley FM Association to be held on Friday,
May 17, 2002!

For reservations, please contact the TAPR office as described below.

What?
        An event for the digitally-inclined ham, featuring:
        * Buffet dinner (Prime Rib, Chicken, and Pasta)
        * Keynote Address (Speaker to be named)
        * TAPR special interest group meetings
        * "Birds of a Feather" gatherings

When?
        Friday evening, May 17, 2002
        Doors open at 7:00 pm; dinner served at 7:30 pm
        Speaker and meetings after dinner

Where?
        Kohler's Banquet Center, 4548 Presidential Way, Kettering
        (39 40.75N, 84 08.43W), about 6 miles SE of downtown Dayton --
        just off of East David Road. Detailed directions and maps are available
        on the TAPR web site (http://www.tapr.org/tapr/html/Fdayton.maps.html)
        or at the TAPR booth.

How?
        Dinner requires advance registration and payment through TAPR.
        Tickets will be available at the TAPR booth on Friday, though
        we strongly encourage registration <before> Hamvention. The cost
        is $25.00 per person, tax and tip included.

        All amateurs are welcome to attend, enjoy the speaker, and
        particpate in the meetings, although only those purchasing a dinner
        can eat.

        To register, contact:
        PACK*BASH
        c/o TAPR
        8987-309 E. Tanque Verde Road #337
        Tucson, AZ   85749-9399

        Phone: 972-671-TAPR (8277)
        Fax: 972-671-8716
        Internet: tapr@tapr.org

        Visa/Mastercard Accepted

Who?
        PACK*BASH is co-sponsored by TAPR -- Tucson Amateur Packet Radio,
        the national leader in digital communication -- and the Miami
        Valley FM Association, Dayton's packet radio club.

For more information (including maps), go to
http://www.tapr.org/tapr/html/dayton.html#packetbash, or send email to
tapr@tapr.org.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Digital BASH Update

From: John Ackermann N8UR <jra@febo.com>
Date: Wed, 24 Apr 2002 11:21:33 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76154-2002.04.24-10.57.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

We're very happy to announce that Bdale Garbe, KB0G, will be the keynote
speaker at the TAPR/MVFMA Digital BASH on Friday evening at Hamvention.

Bdale is one of the long-time "good guys" in the digital radio and amateur
satellite worlds. He was in the middle of the early work on KA9Q's "NET"
and "NOS" programs, pioneered megabit-rate packet radio, and in the
satellite world was heavily involved in the RUDAK and AO-40 GPS
experiments. Back in the Old Days, he was a board member and Vice
President of TAPR, and remains one of TAPR's best friends. On a different
front, Bdale was just elected as Debian Project Leader, so he now oversees
one of the major Linux distributions -- and the one that is by far the most
ham-friendly. Bdale works in the Linux development group at HP, and in his
spare (?) time does VHF/UHF/microwave contesting and roaming.

Bdale's talk will blend all of these interests into an entertaining and
informative presentation titled "From Bits in the Basement to Debian -- and
Back Again".

You can find more information about the Digital BASH and TAPR's other
Hamvention activities at http://www.tapr.org/tapr/dayton/.

See you there!

73,
John

John Ackermann   N8UR   jra@febo.com   http://www.febo.com
President, TAPR   n8ur@tapr.org   http://www.tapr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] DSP 38K

From: "Pat McGrath" <ka6tya@earthlink.net>
Date: Thu, 25 Apr 2002 14:05:10 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76479-2002.04.25-16.38.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Where is a copy of the 38K DSP ASM for use with UO-36 and MO-46 available?

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: DSP 38K

From: Eduardo Jacob <edu@kender.es>
Date: Thu, 25 Apr 2002 23:38:15 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-76488-2002.04.25-17.12.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

At 14:05 25/04/02 -0700, you wrote:

>Where is a copy of the 38K DSP ASM for use with UO-36 and MO-46 available?

The site is this one, although they seem to have disconnected the ftp
server. I'll check with them tomorrow.

http://bips.bi.ehu.es/prj/modem/

         Eduardo/EA2BAJ

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

May 2002

Original source file: dsp.0205
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0205

1. [dsp] DSP 38K Help

From: "Pat McGrath" <ka6tya@earthlink.net>
Date: Wed, 1 May 2002 14:25:20 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-77391-2002.05.01-16.58.47--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Help

I would like a copy of the 38K DSP56002EVM ASM for use with UO-36 and
MO-46 available?

The copy that work with Douglas Braun DSP version would be ideal.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] RE: DSP 38K Help

From: "Carcia, Frank A.   HS" <francis.carcia@hs.utc.com>
Date: Thu, 2 May 2002 08:13:14 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-77458-2002.05.02-07.48.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Does this help?
                fc

-----Original Message-----
From: Pat McGrath [mailto:ka6tya@earthlink.net]
Sent: Wednesday, May 01, 2002 5:25 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] DSP 38K Help

Help

I would like a copy of the 38K DSP56002EVM ASM for use with UO-36 and
MO-46 available?

The copy that work with Douglas Braun DSP version would be ideal.

You are currently subscribed to dsp as: francis.carcia@hs.utc.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
[Attachment: Boot.zip; application/octet-stream; 4,594 bytes]

3. [dsp] RE: DSP 38K Help

From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Date: Thu, 2 May 2002 08:35:17 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-77463-2002.05.02-08.10.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Anybody out there with a good flash loader for the dsp56303evm with the 4218 codec.
different than the board with the 4215. Mot one doesn't load X and y data.
Here is frone file for asm if that helps. fc

-----Original Message-----
From: Carcia, Frank A. HS [mailto:francis.carcia@hs.utc.com]
Sent: Thursday, May 02, 2002 8:13 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] RE: DSP 38K Help

Does this help?
fc

-----Original Message-----
From: Pat McGrath [mailto:ka6tya@earthlink.net]
Sent: Wednesday, May 01, 2002 5:25 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] DSP 38K Help

Help

I would like a copy of the 38K DSP56002EVM ASM for use with UO-36 and MO-46 available?

The copy that work with Douglas Braun DSP version would be ideal.

You are currently subscribed to dsp as: francis.carcia@hs.utc.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
[Attachment: frohne1.zip; application/octet-stream; 319,152 bytes]

4. [dsp] RE: DSP 38K Help

From: "Pat McGrath" <ka6tya@earthlink.net>
Date: Thu, 2 May 2002 10:01:10 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-77487-2002.05.02-12.35.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thanks but not whaat I was looking for.

----- Original Message -----
From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Thursday, May 02, 2002 5:13 AM
Subject: [dsp] RE: DSP 38K Help

> Does this help?
> fc
>
> -----Original Message-----
> From: Pat McGrath [mailto:ka6tya@earthlink.net]
> Sent: Wednesday, May 01, 2002 5:25 PM

> To: TAPR DSP Special Interest Group
> Subject: [dsp] DSP 38K Help
>
>
>
> Help
>
>
> I would like a copy of the 38K DSP56002EVM ASM for use with UO-36 and
> MO-46 available?
>
> The copy that work with Douglas Braun DSP version would be ideal.
>
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>
>
> ---
> You are currently subscribed to dsp as: francis.carcia@hs.utc.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Spring _Packet_Status_Register_ Available Online

From: "John R. Ackermann" <jra@febo.com>
Date: Thu, 02 May 2002 20:26:04 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-77553-2002.05.02-20.00.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

As the subject says... the new issue of TAPR's journal, the
_Packet_Status_Register_, is now available online. You can go to
http://www.tapr.org/tapr/html/Fpsr.html, or obtain it via ftp from
ftp://ftp.tapr.org/psr/Spring_83_2002.pdf. You'll need Adobe Acrobat or
other PDF file reader to view the document.

Stan Horzepa, WA1LOU, has taken the reins as the PSR's editor, and I'd like
to thank him for his great work on this issue. Please send comments,
suggestions, or -- best of all -- articles to Stan at psr@tapr.org.

73,
John N8UR

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] FIR filter: C++ class

From: Donald E Haselwood <dhaselwood@ij.net>
Date: Tue, 28 May 2002 23:06:52 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-81730-2002.05.28-22.44.35--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I made a useful C++ class that sets up the coefficients, storage array, and
implements a FIR filter. I'd be happy to email a copy to anyone who wants
it.

It implements filters of any length, and has filter windowing options of
Hamming, Hanning, and Blackman. Taking the output of the DSP package,
PC-DSP, (the package from that TAPR purchase some years ago), running it
through a program to reformat, then copying it into a routine was a pain.
Then I ran into the length restriction of the DSP package (256 pts), so I
wrote my own. It makes it very easy to set up multiple filters, change,
them, etc. I've been investigating various schemes for filtering the gps

readings for steering a Rb, and using this class made it easy to tinker
with cutoff frequencies and lengths.

Example:
To setup a 1024 pt filter, .001 cutoff, Blackman windowed:
CFirLp fir1(1024, .001, BLACKMAN);

To use:
y = fir1.Fir(x); // y is filtered output, x is new input value

Don, W4DH

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] RE: FIR filter: C++ class

From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Date: Wed, 29 May 2002 09:17:46 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-81793-2002.05.29-08.54.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Don,
Please email me your information.
Thank You,
Frank Carcia, WA1GFZ

-----Original Message-----
From: Donald E Haselwood [mailto:dhaselwood@ij.net]
Sent: Tuesday, May 28, 2002 11:07 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] FIR filter: C++ class

I made a useful C++ class that sets up the coefficients, storage array, and
implements a FIR filter. I'd be happy to email a copy to anyone who wants
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Don, W4DH

You are currently subscribed to dsp as: francis.carcia@hs.utc.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] RE: FIR filter: C++ class <LYR8831-81793-2002.05.29-08.54.19--norman#pcseng.com@lists.tapr.org>

From: Norman Gillaspie <norman@pcseng.com>
Date: Wed, 29 May 2002 06:24:58 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-81795-2002.05.29-08.59.57--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

I would like a copy also. Can you email a copy to norman@pcseng.com.

Thanks Norman
325 Sharon Park Dr. #210
Menlo Park , Ca 94026
Tel 650-85405263
Email norman@pcseng.com

-----Original Message-----
From: bounce-dsp-8831@lists.tapr.org
[mailto:bounce-dsp-8831@lists.tapr.org] On Behalf Of Carcia, Frank A. HS
Sent: Wednesday, May 29, 2002 6:18 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] RE: FIR filter: C++ class

Hi Don,
Please email me your information.
Thank You,
Frank Carcia, WA1GFZ

-----Original Message-----
From: Donald E Haselwood [mailto:dhaselwood@ij.net]
Sent: Tuesday, May 28, 2002 11:07 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] FIR filter: C++ class

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To use:
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Don, W4DH

You are currently subscribed to dsp as: francis.carcia@hs.utc.com To
unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: norman@pcseng.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: FIR filter: C++ class

From: "Hughy Hearn" <hhearn@uwf.edu>
Date: Wed, 29 May 2002 08:33:42 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-81797-2002.05.29-09.09.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

GM OM

I, too, would like a copy. Looks like you may be busy for a while.

Tks es 73
Huey K4PMT

----- Original Message -----
From: "Donald E Haselwood" <dhaselwood@ij.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, May 28, 2002 10:06 PM
Subject: [dsp] FIR filter: C++ class

> I made a useful C++ class that sets up the coefficients, storage array,
and
> implements a FIR filter. I'd be happy to email a copy to anyone who wants
> it.
>
> It implements filters of any length, and has filter windowing options of
> Hamming, Hanning, and Blackman. Taking the output of the DSP package,
> PC-DSP, (the package from that TAPR purchase some years ago), running it
> through a program to reformat, then copying it into a routine was a pain.
> Then I ran into the length restriction of the DSP package (256 pts), so I
> wrote my own. It makes it very easy to set up multiple filters, change,
> them, etc. I've been investigating various schemes for filtering the gps
> readings for steering a Rb, and using this class made it easy to tinker
> with cutoff frequencies and lengths.
>
> Example:
> To setup a 1024 pt filter, .001 cutoff, Blackman windowed:
> CFirLp fir1(1024, .001, BLACKMAN);
>
> To use:
> y = fir1.Fir(x); // y is filtered output, x is new input value
>
>
> Don, W4DH
>
>
>
> ---
> You are currently subscribed to dsp as: hhearn@uwf.edu
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: FIR filter: C++ class <LYR27906-81797-2002.05.29-09.09.33--rwmcgwier#comcast.net@lists.tapr.org>

From: Robert McGwier <rwmcgwier@comcast.net>
Date: Wed, 29 May 2002 09:45:32 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-81801-2002.05.29-09.22.49--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Don's email is dhaselwood@ij.net, that is better than broadcast
requests.

----- Original Message -----
From: "Donald E Haselwood" <dhaselwood@ij.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, May 28, 2002 10:06 PM
Subject: [dsp] FIR filter: C++ class

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: FIR filter: C++ class

From: Tomi Manninen <tpm@prkele.tky.hut.fi>
Date: Wed, 29 May 2002 21:01:33 +0300 (EEST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>

Message-ID: <LYR3532-81849-2002.05.29-13.37.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

On Wed, 29 May 2002, Robert McGwier wrote:

> Don's email is dhaselwood@ij.net, that is better than broadcast
> requests.

True, however I would still like to make a public request for Don to
release the code under the GPL and stick it somewhere for download.

That way everyone would benefit from it...

--
Tomi Manninen Internet: oh2bns@sral.fi
OH2BNS AX.25: oh2bns@oh2rbi.fin.eu
KP20ME04 Amprnet: oh2bns@oh2rbi.ampr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

12. [dsp] Re: FIR filter: C++ class

From: "Lawrence Stoskopf" <stoskopf@tri.net>
Date: Thu, 30 May 2002 23:21:46 GMT
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82161-2002.05.30-18.57.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Actually, such a quality program should be on the next TAPR CD!

N0UU

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] Re: FIR filter: C++ class

From: "Pat McGrath" <ka6tya@earthlink.net>
Date: Thu, 30 May 2002 22:01:09 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82223-2002.05.31-00.36.38--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Please send me a copy

----- Original Message -----
From: "Donald E Haselwood" <dhaselwood@ij.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Tuesday, May 28, 2002 8:06 PM
Subject: [dsp] FIR filter: C++ class

> I made a useful C++ class that sets up the coefficients, storage array,
and
> implements a FIR filter. I'd be happy to email a copy to anyone who wants
> it.
>
> It implements filters of any length, and has filter windowing options of
> Hamming, Hanning, and Blackman. Taking the output of the DSP package,
> PC-DSP, (the package from that TAPR purchase some years ago), running it
> through a program to reformat, then copying it into a routine was a pain.
> Then I ran into the length restriction of the DSP package (256 pts), so I
> wrote my own. It makes it very easy to set up multiple filters, change,
> them, etc. I've been investigating various schemes for filtering the gps
> readings for steering a Rb, and using this class made it easy to tinker
> with cutoff frequencies and lengths.
>
> Example:
> To setup a 1024 pt filter, .001 cutoff, Blackman windowed:
> CFirLp fir1(1024, .001, BLACKMAN);
>
> To use:
> y = fir1.Fir(x); // y is filtered output, x is new input value
>
>
> Don, W4DH

>
>
>
> ---
> You are currently subscribed to dsp as: ka6tya@earthlink.net
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

June 2002

Original source file: dsp.0206
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0206

1. [dsp] Re: FIR filter: C++ class

From: Jim Sanford <wb4gcs@amsat.org>
Date: Sat, 01 Jun 2002 21:40:51 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-82627-2002.06.01-21.18.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Don:
I'd like one too.
Tanks & 73,
Jim
wb4gcs@amsat.org

Donald E Haselwood wrote:
>
> I made a useful C++ class that sets up the coefficients, storage array, and
> implements a FIR filter. I'd be happy to email a copy to anyone who wants
> it.
>
> It implements filters of any length, and has filter windowing options of
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> PC-DSP, (the package from that TAPR purchase some years ago), running it
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> Then I ran into the length restriction of the DSP package (256 pts), so I
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> them, etc. I've been investigating various schemes for filtering the gps
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> Example:
> To setup a 1024 pt filter, .001 cutoff, Blackman windowed:
> CFirLp fir1(1024, .001, BLACKMAN);
>
> To use:
> y = fir1.Fir(x); // y is filtered output, x is new input value
>
> Don, W4DH
>
> ---
> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: FIR filter: C++ class

From: Donald E Haselwood <dhaselwood@ij.net>
Date: Mon, 03 Jun 2002 17:53:30 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83039-2002.06.03-22.52.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Jim,

Here is the file. Let me know if you have problems with it.

Don W4DH

At 09:40 PM 6/1/02 -0400, you wrote:
>Don:
>I'd like one too.
>Tanks & 73,
>Jim
>wb4gcs@amsat.org
>
>
>
>Donald E Haselwood wrote:
>>

>> I made a useful C++ class that sets up the coefficients, storage array, and
>> implements a FIR filter. I'd be happy to email a copy to anyone who wants
>> it.
>>
>> It implements filters of any length, and has filter windowing options of
>> Hamming, Hanning, and Blackman. Taking the output of the DSP package,
>> PC-DSP, (the package from that TAPR purchase some years ago), running it
>> through a program to reformat, then copying it into a routine was a pain.
>> Then I ran into the length restriction of the DSP package (256 pts), so I
>> wrote my own. It makes it very easy to set up multiple filters, change,
>> them, etc. I've been investigating various schemes for filtering the gps
>> readings for steering a Rb, and using this class made it easy to tinker
>> with cutoff frequencies and lengths.
>>
>> Example:
>> To setup a 1024 pt filter, .001 cutoff, Blackman windowed:
>> CFirLp fir1(1024, .001, BLACKMAN);
>>
>> To use:
>> y = fir1.Fir(x); // y is filtered output, x is new input value
>>
>> Don, W4DH
>>
>> ---
>> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
>> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>---
>You are currently subscribed to dsp as: dhaselwood@ij.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
[Attachment: FirLp.zip; application/octet-stream; 4,309 bytes]

3. [dsp] Re: FIR filter: C++ class

From: Donald E Haselwood <dhaselwood@ij.net>
Date: Mon, 03 Jun 2002 23:19:03 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83040-2002.06.03-22.55.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Sorry, I forgot to change the reply address.

I've uploaded the file and should now be on /software_lib/dsp/.

Don W4DH

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Re: FIR filter: C++ class

From: Michael Buyanin <dsp4us@yahoo.com>
Date: Mon, 3 Jun 2002 22:25:35 -0700 (PDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83067-2002.06.04-01.01.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Similar resource:

http://www.intel.com/software/products/perflib/spl/splfeatures.htm

Michael, K6DSP

_____
Do You Yahoo!?
Yahoo! - Official partner of 2002 FIFA World Cup
http://fifaworldcup.yahoo.com

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: FIR filter: C++ class

From: Jim Sanford <wb4gcs@amsat.org>
Date: Tue, 04 Jun 2002 16:35:33 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83171-2002.06.04-16.12.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Got it, thanks!
73,
Jim

Donald E Haselwood wrote:
>
> Jim,
>
> Here is the file. Let me know if you have problems with it.
>
> Don W4DH
>
> At 09:40 PM 6/1/02 -0400, you wrote:
> >Don:
> >I'd like one too.
> >Tanks & 73,
> >Jim
> >wb4gcs@amsat.org
> >
> >
> >
> >Donald E Haselwood wrote:
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> >> It implements filters of any length, and has filter windowing options of
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> >>
> >> Example:
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> >> CFirLp fir1(1024, .001, BLACKMAN);
> >>
> >> To use:
> >> y = fir1.Fir(x); // y is filtered output, x is new input value
> >>
> >> Don, W4DH
> >>
> >> ---
> >> You are currently subscribed to dsp as: WB4GCS@AMSAT.ORG
> >> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >---
> >You are currently subscribed to dsp as: dhaselwood@ij.net
> >To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >
>
>   --
>   Name: FirLp.zip
>   FirLp.zip   Type: Download File (application/zip)
>   Encoding: base64
>
>   --

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] RE: FIR filter: C++ class

From: "Tomasz Szwelnik" <tomasz.szwelnik@gdansk.sprint.pl>
Date: Thu, 6 Jun 2002 10:56:28 +0200

To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83477-2002.06.06-04.33.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello!!!

Yes, I want a copy of your useful C++ class
Please send me to email box: szwelas@gdansk.sprint.pl

Thank You
Best regards
Tom

-----Original Message-----
From: bounce-dsp-25751@lists.tapr.org
[mailto:bounce-dsp-25751@lists.tapr.org]On Behalf Of Donald E Haselwood
Sent: Wednesday, May 29, 2002 5:07 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] FIR filter: C++ class

I made a useful C++ class that sets up the coefficients, storage array, and
implements a FIR filter. I'd be happy to email a copy to anyone who wants
it.

It implements filters of any length, and has filter windowing options of
Hamming, Hanning, and Blackman. Taking the output of the DSP package,
PC-DSP, (the package from that TAPR purchase some years ago), running it
through a program to reformat, then copying it into a routine was a pain.
Then I ran into the length restriction of the DSP package (256 pts), so I
wrote my own. It makes it very easy to set up multiple filters, change,
them, etc. I've been investigating various schemes for filtering the gps
readings for steering a Rb, and using this class made it easy to tinker
with cutoff frequencies and lengths.

Example:
To setup a 1024 pt filter, .001 cutoff, Blackman windowed:
CFirLp fir1(1024, .001, BLACKMAN);

To use:
y = fir1.Fir(x); // y is filtered output, x is new input value

Don, W4DH

You are currently subscribed to dsp as: tomasz.szwelnik@gdansk.sprint.pl
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] RE: FIR filter: C++ class

From: Donald E Haselwood <dhaselwood@ij.net>
Date: Thu, 06 Jun 2002 13:54:36 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83562-2002.06.06-13.31.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Tom,

Here is the file. Let me know if you have problems.

Don W4DH

At 10:56 AM 6/6/02 +0200, you wrote:
>Hello!!!
>
>Yes, I want a copy of your useful C++ class
>Please send me to email box: szwelas@gdansk.sprint.pl
>
>Thank You
>Best regards
>Tom
>

>-----Original Message-----
>From: bounce-dsp-25751@lists.tapr.org
>[mailto:bounce-dsp-25751@lists.tapr.org]On Behalf Of Donald E Haselwood
>Sent: Wednesday, May 29, 2002 5:07 AM
>To: TAPR DSP Special Interest Group
>Subject: [dsp] FIR filter: C++ class
>
>
>I made a useful C++ class that sets up the coefficients, storage array, and
>implements a FIR filter. I'd be happy to email a copy to anyone who wants
>it.
>
>It implements filters of any length, and has filter windowing options of
>Hamming, Hanning, and Blackman. Taking the output of the DSP package,
>PC-DSP, (the package from that TAPR purchase some years ago), running it
>through a program to reformat, then copying it into a routine was a pain.
>Then I ran into the length restriction of the DSP package (256 pts), so I
>wrote my own. It makes it very easy to set up multiple filters, change,
>them, etc. I've been investigating various schemes for filtering the gps
>readings for steering a Rb, and using this class made it easy to tinker
>with cutoff frequencies and lengths.
>
>Example:
>To setup a 1024 pt filter, .001 cutoff, Blackman windowed:
>CFirLp fir1(1024, .001, BLACKMAN);
>
>To use:
>y = fir1.Fir(x); // y is filtered output, x is new input value
>
>
>Don, W4DH
>
>
>
>---
>You are currently subscribed to dsp as: tomasz.szwelnik@gdansk.sprint.pl
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: dhaselwood@ij.net
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
[Attachment: FirLp.zip; application/octet-stream; 4,309 bytes]

8. [dsp] Re: dsp digest: June 06, 2002

From: Malcolm Macleod <email4malcolm@yahoo.com>
Date: Fri, 7 Jun 2002 04:36:07 -0700 (PDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-83727-2002.06.07-07.12.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

re: FIR filter
Could I have a look at this as well
<email4malcolm@yahoo.com>

Thanks,
Malcolm

 -
>
> Subject: RE: FIR filter: C++ class
> From: "Tomasz Szwelnik"
> <tomasz.szwelnik@gdansk.sprint.pl>
> Date: Thu, 6 Jun 2002 10:56:28 +0200
> X-Message-Number: 1
>
> Hello!!!
>
> Yes, I want a copy of your useful C++ class
> Please send me to email box:
> szwelas@gdansk.sprint.pl
>
> Thank You
> Best regards
> Tom
>
> -----Original Message-----

> From: bounce-dsp-25751@lists.tapr.org
> [mailto:bounce-dsp-25751@lists.tapr.org]On Behalf Of
> Donald E Haselwood
> Sent: Wednesday, May 29, 2002 5:07 AM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] FIR filter: C++ class
>
>
> I made a useful C++ class that sets up the
> coefficients, storage array, and
> implements a FIR filter. I'd be happy to email a
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> It implements filters of any length, and has filter
> windowing options of
> Hamming, Hanning, and Blackman. Taking the output
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> years ago), running it
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> To use:
> y = fir1.Fir(x); // y is filtered output, x is new
> input value
>
>
> Don, W4DH
>
>
>
> ---
> You are currently subscribed to dsp as:
> tomasz.szwelnik@gdansk.sprint.pl
> To unsubscribe send a blank email to
> leave-dsp-3532K@lists.tapr.org
>
>
>

>
> Subject: RE: FIR filter: C++ class
> From: Donald E Haselwood <dhaselwood@ij.net>
> Date: Thu, 06 Jun 2002 13:54:36 -0400
> X-Message-Number: 2
>
> --====================_1023400476==_
> Content-Type: text/plain; charset="us-ascii"
>
> Tom,
>
> Here is the file. Let me know if you have problems.
>
> Don W4DH
>
>
> At 10:56 AM 6/6/02 +0200, you wrote:
> >Hello!!!
> >
> >Yes, I want a copy of your useful C++ class
> >Please send me to email box:
> szwelas@gdansk.sprint.pl
> >
> >Thank You

> >Best regards
> >Tom
> >
> >-----Original Message-----
> >From: bounce-dsp-25751@lists.tapr.org
> >[mailto:bounce-dsp-25751@lists.tapr.org]On Behalf
> Of Donald E Haselwood
> >Sent: Wednesday, May 29, 2002 5:07 AM
> >To: TAPR DSP Special Interest Group
> >Subject: [dsp] FIR filter: C++ class
> >
> >
> >I made a useful C++ class that sets up the
> coefficients, storage array, and
> >implements a FIR filter. I'd be happy to email a
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> >
> >It implements filters of any length, and has filter
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> >
> >To use:
> >y = fir1.Fir(x); // y is filtered output, x is new
> input value
> >
> >
> >Don, W4DH
> >
> >
> >
> >---
> >You are currently subscribed to dsp as:
> tomasz.szwelnik@gdansk.sprint.pl
> >To unsubscribe send a blank email to
> leave-dsp-3532K@lists.tapr.org
> >
> >
> >---
> >You are currently subscribed to dsp as:
> dhaselwood@ij.net
> >To unsubscribe send a blank email to
> leave-dsp-3532K@lists.tapr.org
> >
> >
> --====================_1023400476==_
> Content-Type: application/octet-stream;
> name="FirLp.zip"
> Content-Transfer-Encoding: base64
> Content-Disposition: attachment;
> filename="FirLp.zip"
>
>
UEsDBBQAAAAIABOnuSzC4Mm90gQAAN0JAAAKAAAAUmVhZE1lLkZpco1W/W/bNhD9OQL8PxwyYHFQ
>
f9Tauq4pNsB14yarmwR1uu4D+4GWKJmoTKokFcMdur9970jZddxgGAIktnT3ePfeu2OeDNMnw/Tx
>
47STTMxqJbV3ZDRNpsrO6k7CP326XSpH1jReaUlrgc+Npkbn0tIblVnjTOFp7ptcGZo8evTD4PGg
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TdzUKhMVNU6KUp7xQ6KpsZQJJx2tl9JK8ktJhaq8tEqXZOVKKO1IaXKZqWWP5KAckKDMaGcqhG9q

```
>
SaKu+32KeHPpPWc29R5UOOubXBZc8vTy7fzyj3N6dnQ0HNJVs1qgclOQF7WjrryT+pS/Fsq22V9S
>
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>
jO/kKNhxZtYEGvu1cK6NTWNs+lXslfF9Z/rVvZTPcfJftUPJc1tvtl7JjCwKlSleMwM6kA1GFdgu
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>
drOlSWDKOonb4FbxNlwDRmPu+Vx+paXMwTFnZWaFrRNGHfCXxQN1QQhcTHnOr/Red/vwAuLpPBaG
>
ipCMzO1NdFhtKIHVr8BYTs4gT0SFSlxAB9uN+RpEhu+hlFJLKzwAFhD53jXJS4YbEzY4CW+Nk18S
>
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>
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>
0Za1A48xU3LyV9up/6u3gZfgIBQnk5TsYgJSBAxHTFBE9XpfA7U68OY6YRnIEA5cUIm3XaMeSJEp
>
=== message truncated ===


_____________________________________________________
Do You Yahoo!?
Yahoo! - Official partner of 2002 FIFA World Cup
http://fifaworldcup.yahoo.com

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

9. [dsp] Left / Right codec delay

```
From: "Carcia, Frank A.           HS" <francis.carcia@hs.utc.com>
Date: Mon, 17 Jun 2002 12:18:24 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-85409-2002.06.17-11.56.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

```
>       Hi All,
>       I drive a MOT DSP56303EVM and observe a time delay between the codec
> channels
>       using  pass.asm demo software and other user software. I'm driving
> both channels from
>       a common source and measure a 10 microsecond delay between the two
> outputs
>       using a sample rate of 48 kHz. A slower sample rate increases the
> delay. The
>       DSP clock select has no effect on this delay and the input frequency
> doesn't change
>       the delay. I suspect the read data from the codec is the problem
> because I modified the
```

> program to send the left data out the right channel and right out
> the left. The delay
> stayed the same. Enclosed is the demo software. I'm trying to use
> the evm as a I/Q
> demodulator hanging off a receiver IF. <<Demo_Code_100.zip>>
[Attachment: Demo_Code_100.zip; application/octet-stream; 28,260 bytes]

July 2002

Original source file: dsp.0207
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0207

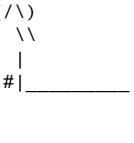
1. [dsp] EVM Radio Interface <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org>

From: Gerrit Polder <polder@ph.tn.tudelft.nl>
Date: Tue, 02 Jul 2002 16:50:25 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87740-2002.07.02-10.29.12--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

is there anybody who likes to sell his EVM Radio Interface kit?

thanks,
Gerrit.

--
From: Gerrit Polder, Plant Research International
P.O. Box 16
6700 AA Wageningen
The Netherlands
Email: polder@ph.tn.tudelft.nl
WWW: http://www.ph.tn.tudelft.nl/~polder
Phone: +31.317.476842
Fax: +31.317.418094



You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] RE: EVM Radio Interface <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org>

From: "Carcia, Frank A. HS" <francis.carcia@hs.utc.com>
Date: Tue, 2 Jul 2002 11:13:36 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87745-2002.07.02-10.52.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Gerrit,
I'm presently working on a radio interface using a DSP56303 EVM with code
modified from Frohne.
The I/Q demodulator is a board from a Yeasu radio. I suggest you check out
this QEX and the
next few issues. I plan to build my own I/Q interface in the future. The EVM
works great with some help from Pete WA1SOV. Check out his web site. I have
my EVM connected to a Racal RA6830 455 KHz
IF output. The filters are brick wall. QST ran a R2 direct conversion radio
that Frohne added a DSP560002EVM as a demodulator. Search on Frohne to get
his stuff. I think QEX will move
things into the future so don't spend any money until you check it out.
fc, WA1GFZ

> -----Original Message-----
> From: Gerrit Polder [SMTP:polder@ph.tn.tudelft.nl]
> Sent: Tuesday, July 02, 2002 10:50 AM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] EVM Radio Interface
> <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org
> >
>
> is there anybody who likes to sell his EVM Radio Interface kit?
>
> thanks,
> Gerrit.
>
>
>
>
> --

> From: Gerrit Polder, Plant Research International
>   P.O. Box 16   \\ //
>   6700 AA Wageningen   \/
>   The Netherlands   (/\)
> Email: polder@ph.tn.tudelft.nl   _   // \\
> WWW: http://www.ph.tn.tudelft.nl/~polder   / \ | |
> ~~~~~~/   \   _____| #|_________
> Phone: +31.317.476842   \~~~/
> Fax: +31.317.418094   _/
>
>
> ---
> You are currently subscribed to dsp as: francis.carcia@hs.utc.com
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Searching supplier for 68HC705-K1CDW

From: "Hermann Schmickler" <hermann.schmickler@cern.ch>
Date: Wed, 3 Jul 2002 7:7:8
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87914-2002.07.03-07.44.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hallo,

on the DSP56002 evaluation board is a chip called 68HC705. This is a
MOTOROLA microcontroller, which is ROM prgramed.
The K1CDW on the evaluation board acts as ONCE interface.
Does anybody know a supplier for this chip (I need more than 20).

Regards Hermann SCHmickler

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] RE: Searching supplier for 68HC705-K1CDW

From: "Carcia, Frank A.   HS" <francis.carcia@hs.utc.com>
Date: Wed, 3 Jul 2002 08:16:19 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87916-2002.07.03-07.54.11--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

sounds like a MOT part number

-----Original Message-----
From: Hermann Schmickler [mailto:hermann.schmickler@cern.ch]
Sent: Tuesday, July 02, 2002 8:00 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] Searching supplier for 68HC705-K1CDW

Hallo,

on the DSP56002 evaluation board is a chip called 68HC705. This is a
MOTOROLA microcontroller, which is ROM prgramed.
The K1CDW on the evaluation board acts as ONCE interface.
Does anybody know a supplier for this chip (I need more than 20).

Regards Hermann SCHmickler

You are currently subscribed to dsp as: francis.carcia@hs.utc.com
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---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: Searching supplier for 68HC705-K1CDW

From: Tom Genereaux <entropy@sunflower.com>
Date: 03 Jul 2002 09:18:51 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87921-2002.07.03-09.56.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The K1 appears to have been superceded by the KJ1. If the KJ1 will work,
Digi-key has 'em. Or Newark.

http://www.digikey.com/scripts/us/dksus.dll?Detail?Ref=28286&Row=189368

On Wed, 2002-07-03 at 07:07, Hermann Schmickler wrote:
> Hallo,
>
> on the DSP56002 evaluation board is a chip called 68HC705. This is a
> MOTOROLA microcontroller, which is ROM prgramed.
> The K1CDW on the evaluation board acts as ONCE interface.
> Does anybody know a supplier for this chip (I need more than 20).
>
> Regards Hermann SCHmickler
>
> ---
> You are currently subscribed to dsp as: ENTROPY@LAWRENCE.KS.US
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: Searching supplier for 68HC705-K1CDW

From: David Willmore <davidwillmore@iamanidiot.com>
Date: Wed, 03 Jul 2002 11:59:01 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87927-2002.07.03-11.18.09--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> The K1 appears to have been superceded by the KJ1. If the KJ1 will work,
> Digi-key has 'em. Or Newark.
>
> http://www.digikey.com/scripts/us/dksus.dll?Detail?Ref=28286&Row=189368

But is the code available for it? If I remember the layout of that board
right, it connects to the host control port on the '002 and then to the
serial interface to the PC, right?

On another note, I think the K1CDW is K1 (which 705) and DW means wide SO
package. Not sure what the C means, maybe it's K1C?

Cheers,
David

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

7. [dsp] Re: Searching supplier for 68HC705-K1CDW

From: "Hughy Hearn" <hhearn@uwf.edu>
Date: Wed, 3 Jul 2002 10:54:28 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87933-2002.07.03-11.32.16--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I think you will find these parts do not have the ONCE interface ROM mask.
It will be necessary to program the replacement chip. But maybe you already
know this. Good luck!

Hughy K4PMT

-----Original Message-----
From: bounce-dsp-27394@lists.tapr.org
[mailto:bounce-dsp-27394@lists.tapr.org]On Behalf Of Tom Genereaux
Sent: Wednesday, July 03, 2002 4:19 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] Re: Searching supplier for 68HC705-K1CDW

The K1 appears to have been superceded by the KJ1. If the KJ1 will work,
Digi-key has 'em. Or Newark.

http://www.digikey.com/scripts/us/dksus.dll?Detail?Ref=28286&Row=189368

On Wed, 2002-07-03 at 07:07, Hermann Schmickler wrote:

> Hallo,
>
> on the DSP56002 evaluation board is a chip called 68HC705. This is a
> MOTOROLA microcontroller, which is ROM prgramed.
> The K1CDW on the evaluation board acts as ONCE interface.
> Does anybody know a supplier for this chip (I need more than 20).
>
> Regards Hermann SCHmickler
>
> ---
> You are currently subscribed to dsp as: ENTROPY@LAWRENCE.KS.US
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: hhearn@uwf.edu
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

8. [dsp] Re: Searching supplier for 68HC705-K1CDW

From: Tom Genereaux <entropy@sunflower.com>
Date: 03 Jul 2002 12:51:14 +0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87947-2002.07.03-13.29.19--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have no idea if the code for the OnCE port is available or not. It
might be, as part of an application note. I'm sure given the specs one
could recreate it.

On Wed, 2002-07-03 at 16:59, David Willmore wrote:
> > The K1 appears to have been superceded by the KJ1. If the KJ1 will work,
> > Digi-key has 'em. Or Newark.
> >
> > http://www.digikey.com/scripts/us/dksus.dll?Detail?Ref=28286&Row=189368
>
> But is the code available for it? If I remember the layout of that board
> right, it connects to the host control port on the '002 and then to the
> serial interface to the PC, right?
>
> On another note, I think the K1CDW is K1 (which 705) and DW means wide SO
> package. Not sure what the C means, maybe it's K1C?
>
> Cheers,
> David
>
> ---
> You are currently subscribed to dsp as: ENTROPY@LAWRENCE.KS.US
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

9. [dsp] Re: Searching supplier for 68HC705-K1CDW

From: "Michael Hodges" <mail@g4ope.fsnet.co.uk>
Date: Wed, 3 Jul 2002 19:33:28 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87956-2002.07.03-14.11.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The source code was released by Motorola together with the S-record file.
Not sure where I got it from but if you need it I can post it to the list.

Sorry if you get this message more than once, having trouble sending to the
list.

Regards,

Mick Hodges

----- Original Message -----
From: "Hermann Schmickler" <hermann.schmickler@cern.ch>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Wednesday, July 03, 2002 12:00 AM
Subject: [dsp] Searching supplier for 68HC705-K1CDW

> Hallo,
>
> on the DSP56002 evaluation board is a chip called 68HC705. This is a
> MOTOROLA microcontroller, which is ROM prgramed.
> The K1CDW on the evaluation board acts as ONCE interface.
> Does anybody know a supplier for this chip (I need more than 20).
>
> Regards Hermann SCHmickler
>
> ---
> You are currently subscribed to dsp as: mick@g4ope.fsnet.co.uk
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

10. [dsp] Re: Searching supplier for 68HC705-K1CDW

From: "Lyle Johnson" <wa7gxd@fidalgo.net>
Date: Wed, 3 Jul 2002 11:37:40 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87958-2002.07.03-14.16.17--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Please do.

> The source code was released by Motorola together with the S-record file.
> Not sure where I got it from but if you need it I can post it to the list.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

11. [dsp] Re: Searching supplier for 68HC705-K1CDW

From: "Michael Hodges" <mail@g4ope.fsnet.co.uk>
Date: Wed, 3 Jul 2002 20:08:08 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87960-2002.07.03-14.46.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Here it is.

Mick

----- Original Message -----
From: "Lyle Johnson" <wa7gxd@fidalgo.net>
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Sent: Wednesday, July 03, 2002 7:37 PM
Subject: [dsp] Re: Searching supplier for 68HC705-K1CDW

> Please do.
>
> > The source code was released by Motorola together with the S-record
file.
> > Not sure where I got it from but if you need it I can post it to the
list.
>
>
>
> ---
> You are currently subscribed to dsp as: mail@g4ope.fsnet.co.uk
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>

[Attachment: 6805_DST.ASM; application/octet-stream; 42,128 bytes]
[Attachment: 6805_DST.S19; application/octet-stream; 1,370 bytes]

12. [dsp] Re: Searching supplier for 68HC705-K1CDW

From: Douglas Braun & Nadia Papakonstantinou <doug@dougbraun.com>
Date: Wed, 03 Jul 2002 17:39:09 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-87972-2002.07.03-17.17.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

An 6805 assembly code listing came with the EVM documentation, I believe.
If somebody needs it, I could mail them a copy. I may even have it in a file.

Doug Braun
NA1DB

At 12:51 PM 7/3/02 +0000, Tom Genereaux wrote:
>I have no idea if the code for the OnCE port is available or not. It
>might be, as part of an application note. I'm sure given the specs one
>could recreate it.
>
>On Wed, 2002-07-03 at 16:59, David Willmore wrote:
>> > The K1 appears to have been superceded by the KJ1. If the KJ1 will work,
>> > Digi-key has 'em. Or Newark.
>> >
>> > http://www.digikey.com/scripts/us/dksus.dll?Detail?Ref=28286&Row=189368
>>
>> But is the code available for it? If I remember the layout of that board
>> right, it connects to the host control port on the '002 and then to the
>> serial interface to the PC, right?
>>
>> On another note, I think the K1CDW is K1 (which 705) and DW means wide SO
>> package. Not sure what the C means, maybe it's K1C?
>>
>> Cheers,
>> David
>>
>> ---
>> You are currently subscribed to dsp as: ENTROPY@LAWRENCE.KS.US
>> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>>
>
>
>
>---
>You are currently subscribed to dsp as: doug@dougbraun.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

13. [dsp] RE: EVM Radio Interface

From: "Thomas L. Staley Jr." <n8lbt@arrl.net>
Date: Wed, 10 Jul 2002 14:14:35 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-88823-2002.07.10-13.52.36--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello,

Could you tell me which QEX's you are talking about and what they cover?

Thank You,
Tom
N8LBT

"Carcia, Frank A. HS" wrote:

> Hi Gerrit,
> I'm presently working on a radio interface using a DSP56303 EVM with
code
> modified from Frohne.
> The I/Q demodulator is a board from a Yeasu radio. I suggest you check
out
> this QEX and the
> next few issues. I plan to build my own I/Q interface in the future.
The EVM

> works great with some help from Pete WA1SOV. Check out his web site. I
have
> my EVM connected to a Racal RA6830 455 KHz
> IF output. The filters are brick wall. QST ran a R2 direct conversion
radio
> that Frohne added a DSP560002EVM as a demodulator. Search on Frohne to
get
> his stuff. I think QEX will move
> things into the future so don't spend any money until you check it
out.
> fc, WA1GFZ
>
> > -----Original Message-----
> > From: Gerrit Polder [SMTP:polder@ph.tn.tudelft.nl]
> > Sent: Tuesday, July 02, 2002 10:50 AM
> > To: TAPR DSP Special Interest Group
> > Subject: [dsp] EVM Radio Interface
> >
<LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org

> > >
> >
> > is there anybody who likes to sell his EVM Radio Interface kit?
> >
> > thanks,
> > Gerrit.
> >
> >
> >

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

14. [dsp] RE: EVM Radio Interface

From: "Carcia, Frank A.   HS" <francis.carcia@hs.utc.com>
Date: Wed, 10 Jul 2002 16:09:16 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-88831-2002.07.10-15.47.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,
Get the latest issue of QEX. On the web search on "frohne" That site will
direct you to arrl information. I use his filter coefficients in my EVM
which work
well. I think in the near future the $275 I spent will not be worth it.
It has been a good learning tool and the dsp is pretty cool but QEX seems
like it will move things to the future for maybe similar price.
That was why I suggested you hold off for a while. My 56303evm
works in dos so a few years old.

Future QEX will get deeper into the dsp software radio
latest was the first in the series.
Also search on WA1SOV to get his sight.
Pete is a good guy and sure helped me to get going.
He is out of town this week so any email will be slow.
Check out his site.   fc, WA1GFZ

-----Original Message-----
From: Thomas L. Staley Jr. [mailto:n8lbt@arrl.net]
Sent: Wednesday, July 10, 2002 2:15 PM
To: TAPR DSP Special Interest Group
Subject: [dsp] RE: EVM Radio Interface

Hello,

Could you tell me which QEX's you are talking about and what they cover?

Thank You,
Tom
N8LBT

"Carcia, Frank A. HS" wrote:

> Hi Gerrit,
> I'm presently working on a radio interface using a DSP56303 EVM with
code
> modified from Frohne.
> The I/Q demodulator is a board from a Yeasu radio. I suggest you check
out
> this QEX and the
> next few issues. I plan to build my own I/Q interface in the future.
The EVM
> works great with some help from Pete WA1SOV. Check out his web site. I
have
> my EVM connected to a Racal RA6830 455 KHz
> IF output. The filters are brick wall. QST ran a R2 direct conversion
radio
> that Frohne added a DSP560002EVM as a demodulator. Search on Frohne to
get
> his stuff. I think QEX will move
> things into the future so don't spend any money until you check it
out.
> fc, WA1GFZ
>
> > -----Original Message-----
> > From: Gerrit Polder [SMTP:polder@ph.tn.tudelft.nl]
> > Sent: Tuesday, July 02, 2002 10:50 AM
> > To: TAPR DSP Special Interest Group
> > Subject: [dsp] EVM Radio Interface
> >
<LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org

> > >
> >
> > is there anybody who likes to sell his EVM Radio Interface kit?
> >
> > thanks,
> > Gerrit.
> >
> >
> >

You are currently subscribed to dsp as: francis.carcia@hs.utc.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

15. [dsp] RE: EVM Radio Interface

From: Rob Frohne <frohro@wwc.edu>
Date: Wed, 10 Jul 2002 13:41:58 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-88835-2002.07.10-16.19.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Tom,

Have a look at my web site. You can find the articles there. The site
is:

http://www.wwc.edu/~frohro/R2_DSP/R2-DSP.html

73,

Rob

On Wednesday, July 10, 2002, at 11:14 AM, Thomas L. Staley Jr. wrote:

> Hello,
>
> Could you tell me which QEX's you are talking about and what they cover?
>
> Thank You,
> Tom
> N8LBT
>
> "Carcia, Frank A. HS" wrote:
>
>> Hi Gerrit,

>> I'm presently working on a radio interface using a DSP56303 EVM with
> code
>> modified from Frohne.
>> The I/Q demodulator is a board from a Yeasu radio. I suggest you check
> out
>> this QEX and the
>> next few issues. I plan to build my own I/Q interface in the future.
> The EVM
>> works great with some help from Pete WA1SOV. Check out his web site. I
> have
>> my EVM connected to a Racal RA6830 455 KHz
>> IF output. The filters are brick wall. QST ran a R2 direct conversion
> radio
>> that Frohne added a DSP560002EVM as a demodulator. Search on Frohne to
> get
>> his stuff. I think QEX will move
>> things into the future so don't spend any money until you check it
> out.
>> fc, WA1GFZ
>>
>>> -----Original Message-----
>>> From: Gerrit Polder [SMTP:polder@ph.tn.tudelft.nl]
>>> Sent: Tuesday, July 02, 2002 10:50 AM
>>> To: TAPR DSP Special Interest Group
>>> Subject: [dsp] EVM Radio Interface
>>>
> <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org
>
>>>>
>>>
>>> is there anybody who likes to sell his EVM Radio Interface kit?
>>>
>>> thanks,
>>> Gerrit.
>>>
>>>
>>>
>
>
> ---
> You are currently subscribed to dsp as: FROHRO@WWC.EDU
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
--
Rob Frohne, Ph.D., P.E.
E.F. Cross School of Engineering
Walla Walla College
http://www.wwc.edu/~frohro/

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

16. [dsp] RE: EVM Radio Interface <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org>

From: Rob Frohne <frohro@wwc.edu>
Date: Wed, 10 Jul 2002 13:45:52 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-88836-2002.07.10-16.23.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Frank,

When you get your modifications working, why don't you send me a link to
a web site describing them. I'll link it to my site. My stuff is so
outdated now. You can't even get the original 56002EVM anymore, and
periodically I get people asking about using the 56303EVM as you have,
but I don't have one, so I haven't tried it out.

Thanks & 73,

Rob
On Tuesday, July 2, 2002, at 08:13 AM, Carcia, Frank A. HS wrote:

> Hi Gerrit,
> I'm presently working on a radio interface using a DSP56303 EVM with
> code

> modified from Frohne.
> The I/Q demodulator is a board from a Yeasu radio. I suggest you check
> out
> this QEX and the
> next few issues. I plan to build my own I/Q interface in the future.
> The EVM
> works great with some help from Pete WA1SOV. Check out his web site. I
> have
> my EVM connected to a Racal RA6830 455 KHz
> IF output. The filters are brick wall. QST ran a R2 direct conversion
> radio
> that Frohne added a DSP560002EVM as a demodulator. Search on Frohne to
> get
> his stuff. I think QEX will move
> things into the future so don't spend any money until you check it out.
> fc, WA1GFZ
>
>
>> -----Original Message-----
>> From: Gerrit Polder [SMTP:polder@ph.tn.tudelft.nl]
>> Sent: Tuesday, July 02, 2002 10:50 AM
>> To: TAPR DSP Special Interest Group
>> Subject: [dsp] EVM Radio Interface
>> <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org
>>>
>>
>> is there anybody who likes to sell his EVM Radio Interface kit?
>>
>> thanks,
>> Gerrit.
>>
>>
>>
>>
>> --
>> From: Gerrit Polder, Plant Research International
>>   P.O. Box 16   \\ //
>>   6700 AA Wageningen   \/
>>   The Netherlands   (/\)
>> Email: polder@ph.tn.tudelft.nl   _   // \\
>> WWW: http://www.ph.tn.tudelft.nl/~polder   / \ | |
>> ~~~~~~/   \   _____|
>> #|_________
>> Phone: +31.317.476842   \~~~/
>> Fax: +31.317.418094   _/
>>
>>
>> ---
>> You are currently subscribed to dsp as: francis.carcia@hs.utc.com
>> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
> ---
> You are currently subscribed to dsp as: FROHRO@WWC.EDU
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
--
Rob Frohne, Ph.D., P.E.
E.F. Cross School of Engineering
Walla Walla College
http://www.wwc.edu/~frohro/

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

17. [dsp] RE: EVM Radio Interface <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org>

From: "Steven Bible" <n7hpr@tapr.org>
Date: Wed, 10 Jul 2002 21:12:21 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-88889-2002.07.10-23.50.31--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello Frank,

And may I add please write it up and submit it for publication in the DCC
proceedings. Information on the upcoming ARRL and TAPR Digital

Communications Conference is at

  http://www.tapr.org/dcc

73,

- Steve, N7HPR
  (n7hpr@tapr.org)

> -----Original Message-----
> From: bounce-dsp-3222@lists.tapr.org
> [mailto:bounce-dsp-3222@lists.tapr.org]On Behalf Of Rob Frohne
> Sent: Wednesday, July 10, 2002 1:46 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] RE: EVM Radio Interface
> <LYR3030-85409-2002.06.17-11.56.11-
> -POLDER#PH.TN.TUDELFT.NL@lists.tapr.org>
>
>
> Hi Frank,
>
> When you get your modifications working, why don't you send me a link to
> a web site describing them. I'll link it to my site. My stuff is so
> outdated now. You can't even get the original 56002EVM anymore, and
> periodically I get people asking about using the 56303EVM as you have,
> but I don't have one, so I haven't tried it out.
>
> Thanks & 73,
>
> Rob
> On Tuesday, July 2, 2002, at 08:13 AM, Carcia, Frank A. HS wrote:
>
> > Hi Gerrit,
> > I'm presently working on a radio interface using a DSP56303 EVM with
> > code
> > modified from Frohne.
> > The I/Q demodulator is a board from a Yeasu radio. I suggest you check
> > out
> > this QEX and the
> > next few issues. I plan to build my own I/Q interface in the future.
> > The EVM
> > works great with some help from Pete WA1SOV. Check out his web site. I
> > have
> > my EVM connected to a Racal RA6830 455 KHz
> > IF output. The filters are brick wall. QST ran a R2 direct conversion
> > radio
> > that Frohne added a DSP560002EVM as a demodulator. Search on Frohne to
> > get
> > his stuff. I think QEX will move
> > things into the future so don't spend any money until you check it out.
> > fc, WA1GFZ
> >
> >
> >> -----Original Message-----
> >> From: Gerrit Polder [SMTP:polder@ph.tn.tudelft.nl]
> >> Sent: Tuesday, July 02, 2002 10:50 AM
> >> To: TAPR DSP Special Interest Group
> >> Subject: [dsp] EVM Radio Interface
> >>
> <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org
> >>>
> >>
> >> is there anybody who likes to sell his EVM Radio Interface kit?
> >>
> >> thanks,
> >> Gerrit.
> >>
> >>
> >>
> >>
> >> --
> >> From: Gerrit Polder, Plant Research International
> >>   P.O. Box 16   \\ //
> >>   6700 AA Wageningen   \/
> >>   The Netherlands   (/\)
> >> Email: polder@ph.tn.tudelft.nl   _   // \\
> >> WWW: http://www.ph.tn.tudelft.nl/~polder   / \ | |

> >> ~~~~~~/   \   _____|
> >> #|_________
> >> Phone: +31.317.476842   \~~~/
> >> Fax: +31.317.418094   _/
> >>
> >>
> >> ---
> >> You are currently subscribed to dsp as: francis.carcia@hs.utc.com
> >> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> > ---
> > You are currently subscribed to dsp as: FROHRO@WWC.EDU
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >
> --
> Rob Frohne, Ph.D., P.E.
> E.F. Cross School of Engineering
> Walla Walla College
> http://www.wwc.edu/~frohro/
>
>
> ---
> You are currently subscribed to dsp as: n7hpr@tapr.org
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

18. [dsp] RE: EVM Radio Interface <LYR3030-85409-2002.06.17-11.56 .11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org>

From: "Carcia, Frank A.   HS" <francis.carcia@hs.utc.com>
Date: Thu, 11 Jul 2002 10:05:25 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-88917-2002.07.11-09.43.42--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Steve,
This work is not mine. I only did the testing with my DSP56303EVM and
installed a hack in the software. I sent a copy to Rob Frohne and Pete
WA1SOV to fix or publish.   fc

-----Original Message-----
From: Steven Bible [mailto:n7hpr@tapr.org]
Sent: Thursday, July 11, 2002 12:12 AM
To: TAPR DSP Special Interest Group
Subject: [dsp] RE: EVM Radio Interface
<LYR3030-85409-2002.06.17-11.56.11-
-POLDER#PH.TN.TUDELFT.NL@lists.tapr.org>

Hello Frank,

And may I add please write it up and submit it for publication in the DCC
proceedings. Information on the upcoming ARRL and TAPR Digital
Communications Conference is at

  http://www.tapr.org/dcc

73,

- Steve, N7HPR
  (n7hpr@tapr.org)

> -----Original Message-----
> From: bounce-dsp-3222@lists.tapr.org
> [mailto:bounce-dsp-3222@lists.tapr.org]On Behalf Of Rob Frohne
> Sent: Wednesday, July 10, 2002 1:46 PM
> To: TAPR DSP Special Interest Group
> Subject: [dsp] RE: EVM Radio Interface
> <LYR3030-85409-2002.06.17-11.56.11-
> -POLDER#PH.TN.TUDELFT.NL@lists.tapr.org>
>
>

> Hi Frank,
>
> When you get your modifications working, why don't you send me a link to
> a web site describing them. I'll link it to my site. My stuff is so
> outdated now. You can't even get the original 56002EVM anymore, and
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> > The I/Q demodulator is a board from a Yeasu radio. I suggest you check
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> > The EVM
> > works great with some help from Pete WA1SOV. Check out his web site. I
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> > IF output. The filters are brick wall. QST ran a R2 direct conversion
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> > get
> > his stuff. I think QEX will move
> > things into the future so don't spend any money until you check it out.
> > fc, WA1GFZ
> >
> >
> >> -----Original Message-----
> >> From: Gerrit Polder [SMTP:polder@ph.tn.tudelft.nl]
> >> Sent: Tuesday, July 02, 2002 10:50 AM
> >> To: TAPR DSP Special Interest Group
> >> Subject: [dsp] EVM Radio Interface
> >>
> <LYR3030-85409-2002.06.17-11.56.11--POLDER#PH.TN.TUDELFT.NL@lists.tapr.org
> >>>
> >>
> >> is there anybody who likes to sell his EVM Radio Interface kit?
> >>
> >> thanks,
> >> Gerrit.
> >>
> >>
> >>
> >>
> >> --
> >> From: Gerrit Polder, Plant Research International
> >>   P.O. Box 16   \\ //
> >>   6700 AA Wageningen   \/
> >>   The Netherlands   (/\)
> >> Email: polder@ph.tn.tudelft.nl   _   // \\
> >> WWW: http://www.ph.tn.tudelft.nl/~polder   / \ | |
> >> ~~~~~~/   \   _____|
> >> #|_________
> >> Phone: +31.317.476842   \~~~/
> >> Fax: +31.317.418094   _/
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> >> ---
> >> You are currently subscribed to dsp as: francis.carcia@hs.utc.com
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> > ---
> > You are currently subscribed to dsp as: FROHRO@WWC.EDU
> > To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
> >
> >
> --
> Rob Frohne, Ph.D., P.E.
> E.F. Cross School of Engineering
> Walla Walla College
> http://www.wwc.edu/~frohro/
>

>
> ---
> You are currently subscribed to dsp as: n7hpr@tapr.org
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>

You are currently subscribed to dsp as: francis.carcia@hs.utc.com
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

19. [dsp] Write for PSR

From: "stanzepa@earthlink.net" <stanzepa@earthlink.net>
Date: Thu, 18 Jul 2002 13:17:24 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: stanzepa@earthlink.net
Message-ID: <LYR3532-90027-2002.07.18-13.14.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

TAPR members:

Here is your chance to become rich and famous! Well, maybe not rich, but
certainly famous.

The editorial board of Packet Status Register (PSR, TAPR□s quarterly
newsletter) is now soliciting articles, news items, etc. for the next issue
of the newsletter. Topics related to digital Amateur Radio will be given
preference and the editorial board reserves the right to determine what is
suitable for publication.

E-mail your contributions to wa1lou@tapr.org ASAP because the deadline for
the next issue of the newsletter is July 24.

73,

Stan Horzepa, WA1LOU, PSR Editor

---
mail2web - Check your email from the web at
http://mail2web.com/ .

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

20. [dsp] 56L811 Help

From: "Thomas Staley Jr." <n8lbt@arrl.net>
Date: Sun, 21 Jul 2002 11:55:21 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-90428-2002.07.21-11.39.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hello all,

I am looking for some (any) example code for the Motorola 56L811. Maybe something that sets up the CoDAC, reads in a waveform and spits it back out again. Something to get my feet wet. May finial goal is a low pass audio filter then some I/Q stuff.

Thank You,
Tom

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

August 2002

Original source file: dsp.0208
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0208

1. [dsp] 2002 issue of Packet Status Register (PSR)

From: Stan Horzepa <stanzepa@earthlink.net>
Date: Tue, 06 Aug 2002 19:57:09 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-93037-2002.08.06-19.38.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The summer 2002 issue of Packet Status Register (PSR) is now available at
www.tapr.org.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] V.35 Data Scrambler (looking for spec)

From: Rich Osman <Rich@Osman.com>
Date: Fri, 16 Aug 2002 05:20:24 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-94113-2002.08.16-06.01.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I'm looking for a pointer to the spec for this. I've done a Google
search and all I come up with are products referring to the feature.

I dimly remember that this is just a 5 or 6 tap FIR-like structure that
can be decoded with it's complementary function. It function is to
prevent more than 5 bits of the same state from occurring in a row. It
makes clock recovery easier.

I'm interested because I'm trying to figure out how to write a 9600 Baud
EMWIN decoder.

--
mailto:Rich@Osman.com http://www.rich.osman.com
Rich Osman; POB 93167; Southlake, TX 76092 (Near DFW Airport) ARS: N1OZ

If you receive something that says "Send this to everyone you know,"
      PLEASE pretend you don't know me.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] FS -DSP56002EVM and TAPR Radio Interface

From: "Donald Jacob" <djacob1@socal.rr.com>
Date: Thu, 22 Aug 2002 16:57:45 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-95174-2002.08.22-19.37.55--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,
I have a working DSP56002EVM and TAPR Radio Interface with PS for sale. The
Radio Interface is built and board installed and checked out. Comes with
Radio Shack wall wart power supply, books and Motorola software.
Asking $250 + shipping from Southern California.

Thanks
Don WB5EKU
wb5eku@amsat.org
IRLP node 383

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] MSK demodulation

From: "Halvor Liland" <Halvor.Liland@bo.online.no>
Date: Wed, 28 Aug 2002 10:27:33 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-96010-2002.08.28-04.07.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am working with demodulation of MSK on the Analog Devices EZ-KIT (ADSP2181 DSP).

I have the I- and Q-signals and with calculating the angle with the arctan() function I have the ones and zeroes from increasing and decreasing angles. I am looking for a method of symbol synchronization or timing recovery to implement on the ADSP2181. When (at what time in the bite perioed) do I sample the data stream?

I will be pleased to get any idea of how to do an implementation.

LA7BO Halvor Liland

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

5. [dsp] Re: MSK demodulation

From: "Marius Hauki" <marius.hauki@datarespons.no>
Date: Wed, 28 Aug 2002 11:30:27 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-96014-2002.08.28-05.10.48--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi Halvor !! Long time no see !

If you implement a correlator that is correlating on the sync pattern you are looking for, you will get a correlation peak that tells you the moment in time the correlation coefficient was strongest. You should probably do some normalisation of the correlation process so your correlation coefficient magnitude is in the [0.1] interval. This will give your peak search algorithm an easier job.
From the correlator you have the time when the sync pattern matched your correlator pattern and you can adjust your sampling points accordingly. The clock jitter and drift on your DSP platform must be good enough to not drift out of the symbol timing frame until the next sync pattern arrives. A correlator is not too easy to implement always. One trick is to use a matched filter with coefficients that is matching your correlation pattern. Then it will just be a digital filter instead. I think CML (US = MXCOM) does this in their FX range of GMSK chips.

Another method is perhaps to look for the freqency component of your signal clock in the baseband signal with a sharp digital filter. Then you could phase shift , the filter output with 1/2 symbol period and use a zero detector as the high / low decision trigger. If there is no clock component apparing in the base band, you could try to do a non linear operation on the baseband data (x^2, log or something) and then look for the signal component in the second or higher harmonic. You can then divide down to the correct frequency again. (Phase Lock Techniques by Gardner has a very good description of analog sync extraction methods on different baseband coding forms.) Theese techniques could be implemented digitally as well.

To achieve a fast sync lock you could vary the filter bw from large to narrower after the inital sync has been obtained.

By the way, I have a hardware implementation of a GMSK modem with CRC, Interleaving and FEC from a project that I did for someone if you do not HAVE to do it the DSP way. It will give you 9600 bits / sek and RS232 out. Baseband in / FM mod connection out. (Now I will probably be killed by the DSP gurus on this list since I mentioned some analog hardware...)

Best regards
Marius Hauki
LA9EEA

Halvor Liland wrote:

> I am working with demodulation of MSK on the Analog Devices EZ-KIT (ADSP2181
> DSP).
>
> I have the I- and Q-signals and with calculating the angle with the arctan()
> function I have the ones and zeroes from increasing and decreasing angles. I
> am looking for a method of symbol synchronization or timing recovery to
> implement on the ADSP2181. When (at what time in the bite perioed) do I
> sample the data stream?
>
> I will be pleased to get any idea of how to do an implementation.
>
>
> LA7BO Halvor Liland
>
>
>
>
>
> ---
> You are currently subscribed to dsp as: MARIUS@DATARESPONS.NO
> To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>

****
This email and any files transmitted with it are confidential and
intended solely for the use of the individual or entity to whom they
are addressed. If you have received this email in error please notify
the postmaster@datarespons.com .

This email message has been virus checked by the virus programs used
in Data Respons .
****

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: MSK demodulation

From: Michael Buyanin <dsp4us@yahoo.com>
Date: Thu, 29 Aug 2002 09:50:25 -0700 (PDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-96276-2002.08.29-12.30.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> Subject: MSK demodulation
> From: "Halvor Liland" <Halvor.Liland@bo.online.no>
> Date: Wed, 28 Aug 2002 10:27:33 +0200
> X-Message-Number: 1
>
>
> I am working with demodulation of MSK on the Analog
> Devices EZ-KIT (ADSP2181
> DSP).
>
> I have the I- and Q-signals and with calculating the
> angle with the arctan()
> function I have the ones and zeroes from increasing
> and decreasing angles. I
> am looking for a method of symbol synchronization or
> timing recovery to
> implement on the ADSP2181. When (at what time in the
> bite perioed) do I
> sample the data stream?
>
> I will be pleased to get any idea of how to do an
> implementation.
>
>
> LA7BO Halvor Liland
>
>

>
Hello Halvor,

   I've done that exactly about 5 years ago (ADSP2181
assembly + GMSK/MSK modem with coherent receiver). For
demodulator I used feedforward algorithm based on de
Buda paper. Incoming signal is squared and feed to two
band pass filters with center frequencies 2*f_zeros
and 2*f_ones. Those frequencies (at the output of the
filters) used as reference for PLLs, producing f_zeros
and f_ones. After PLLs the signals f_zeros+f_ones and
f_zeros-f_ones are used in quadrature demodulator and
lowest harmonic of f_zeros*f_ones (after LPF) for
clocking (positive peak for I channel and negative -
for Q channel). It worked fine, much better than
non-coherent receiver. The only problem is due to
using narrow band pass filters it cannot tolerate
significant frequency offsets. On the other hand
employing wider filters will degrade quality of
reference frequencies for PLLs and requirements for
number of consecutive zeros or ones will be more
strict. If you are interested I can try to find ADSP
code. I hope it is somewhere on the floppy disks.

Regards.
Michael
K6DSP

_____
Do You Yahoo!?
Yahoo! Finance - Get real-time stock quotes
http://finance.yahoo.com

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

September 2002

Original source file: dsp.0209
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0209

1. [dsp] FFT for PowerPC 860

From: Donald E Haselwood <dhaselwood@ij.net>
Date: Sat, 28 Sep 2002 11:18:00 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-100875-2002.09.28-10.59.45--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Does anyone know where I could find an asm language FFT (real-real) for the
PowerPC?

Regards,

Donald E Haselwood

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: FFT for PowerPC 860

From: David Willmore <davidwillmore@iamanidiot.com>
Date: Mon, 30 Sep 2002 14:26:56 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-101133-2002.09.30-14.08.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

> Does anyone know where I could find an asm language FFT (real-real) for the
> PowerPC?

The 860 doesn't have an FPU, so you're not likely to find some existing
code for this proc that does an FFT--anyone who wants to do fast FFTs
doesn't use this processor.

Moto might provide a floating point emulation library for it, but at
that point, optimized isn't going to be a word you should be using.

Good luck.

Cheers,
David

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

October 2002

Original source file: dsp.0210
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0210

1. [dsp] Write

From: Stan Horzepa <stanzepa@earthlink.net>
Date: Wed, 02 Oct 2002 18:41:05 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-101405-2002.10.02-18.25.14--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

TAPR members:

Here is your chance to become rich and famous! Well, maybe not rich, but
certainly famous.

The editorial board of Packet Status Register (PSR, TAPR□s quarterly
newsletter) is now soliciting articles, news items, etc. for the next issue
of the newsletter. Topics related to digital Amateur Radio will be given
preference and the editorial board reserves the right to determine what is
suitable for publication.

E-mail your contributions to wa1lou@tapr.org ASAP because the deadline for
the next issue of the newsletter is October 24.

73,

Stan Horzepa, WA1LOU, PSR Editor

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Re: Reunion de CETRA

From: John Coppens <jcoppens@iusb.edu>
Date: Mon, 7 Oct 2002 20:27:19 -0500 (CDT)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102113-2002.10.07-21.10.39--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] A ccautionary note: bugbear virus message masquerading as keps

From: Rich Osman <Rich@Osman.com>
Date: Tue, 08 Oct 2002 04:15:54 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-102139-2002.10.08-04.59.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I got this in the morning email. The attachment is the w32.bugbear
mailing worm.

It's unlikely that <I6KZR@xmission.com> has anything to do with this
beyond being in someone else's addressbook, but I've mailed him anyway.

I'm pretty careful, but I got nailed by this one last week. If you get
the virus, look here for authoritative information on detection and
repair:

http://securityresponse.symantec.com/avcenter/venc/data/w32.bugbear@mm.html

> Subject: 2L Keplerian Elements #277
> Date: Tue, 8 Oct 2002 03:19:25 +0200 (added by postmaster@wanadoo.fr)
> From: I6KZR@xmission.com
>
>
> Only when the last fish has been caught,
> Only when the last tree has been cut,
> Only when the last river has been poisened,
> Only then will humanity learn you can't eat money.
> ~Cree Indian Prophecy

```
>
> Inviato da: I6KZR@IK6WID.#AP.IMAR.ITA.EU       =20
>
> TO ALL RADIO AMATEURS BT
>
> AO-10
> 1 14129U 83058B
>
>
>
>    EMAILC~1.EML.scr
>
>                        Name: EMAILC~1.EML.scr
>                         Type:Screen Saver (application/x-unknown-content-type-scrfile)
>                    Encoding:base64
>
--
mailto:Rich@Osman.com  http://www.rich.osman.com
Rich Osman;  POB 93167; Southlake, TX 76092 (Near DFW Airport) ARS: N1OZ

If you receive something that says "Send this to everyone you know,"
      PLEASE pretend you don't know me.



---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

4. [dsp] Psk31 Homepage on IPv6

From: Eduardo Jacob <jtpjatae@bi.ehu.es>
Date: Fri, 25 Oct 2002 17:13:24 +0200
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: dsp@tapr.org
Message-ID: <LYR3532-104421-2002.10.25-10.56.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

This is to tell you that I have put the PSK31 Homepage also in IPv6.

        If you don't know what IPv6 is don't worry, at this time it doesn't offer
you more that what you have. Also you will not be able (normally) to access it.

        http://www.ipv6.haizea.org/psk31.html

        I am getting to the Internet through a tunnel, so don't expect very good
performance, hopefully this can change in following weeks.

        If you work/play with IPv6 you can use this page to test your setup.

        Regards

        Eduardo/EA2BAJ

```
----------------------------------------------------------------------
Eduardo Jacob - Area de Ingenieria Telematica
Departamento de Electronica y Telecomunicaciones
ETSII y de IT               Tel: +34 94 601 4214
UPV / EHU                   Fax: +34 94 601 4259
Alda Urquijo s/n         E-mail: jtpjatae(arroba)bi.ehu.es
E-48013 - Bilbao (Spain)
PGP Key available: Send email w/subject: PGPKEY
fingerprint      : D8 FA 54 49 F7 40 BA AA 09 1A 73 40 A4 26 ED BD


---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

November 2002

Original source file: dsp.0211
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0211

1. [dsp] New Issue of Packet Status Register Available

From: John Ackermann N8UR <jra@febo.com>
Date: Tue, 05 Nov 2002 11:09:27 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-105707-2002.11.05-10.54.20--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The Autumn 2002 issue of TAPR's journal, the _Packet_Status_Register_, is
now available online.

You can download it, and past issues of PSR, from http://www.tapr.org/psr
or via FTP from ftp.tapr.org/psr. The issue name is "Autumn_85_2002.pdf".

73,
John N8UR

John Ackermann   N8UR   jra@febo.com   http://www.febo.com
President, TAPR   n8ur@tapr.org   http://www.tapr.org

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] TI DSP Starter Kits

From: "Dennis Silage" <SILAGE@TEMPLE.EDU>
Date: Mon, 18 Nov 2002 19:29:13
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-107709-2002.11.18-20.13.24--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I have one each of the TI TMS320C31 and TMS320C50 starter kits for sale.
$35 each plus shipping. Books, manuals, software less wall-wart. Dennis
K3DS silage@temple.edu

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] TAPR Motorola EVM56002 Radio Interface For Sale

From: "Alan P. Biddle" <APBIDDLE@ATT.NET>
Date: Sat, 30 Nov 2002 21:43:42 -0000
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-109122-2002.11.30-16.28.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Hi,

I have a TAPR Motorola EVM56002 Radio Interface for sale. It includes the
EVM56002, is assembled, and passes the basic checkout. $225 shipped UPS
CONUS.

Basically, I just haven't needed it, and am doing some serious shack
cleaning. Please contact me off list.

Alan
WA4SCA

NASA has two projects:

Shuttle exists to service Space Station.
Space Station exists to provide missions for Shuttle.
On these two hang all the law and the profits.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

December 2002

Original source file: dsp.0212
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0212

1. [dsp] Authors wanted for PSR and DCC.

From: "Darryl Smith" <Darryl@radio-active.net.au>
Date: Fri, 13 Dec 2002 08:08:23 +1100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-110799-2002.12.12-15.57.32--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

G'Day

TAPR have decided to introduce some changes to support those members of
TAPR who are putting time and energy into the various publications that
TAPR puts out each year.

Three Month Membership Extension for Packet Status Register (PSR)
Articles

--

>From the next issue of PSR, members who have articles published in the
PSR magazine will have their membership of TAPR extended by three
months. It is hoped that this will encourage members to write for the
magazine. The deadline for articles for the next issue of PSR is
mid-January. More information on submitting articles, and on obtaining
copies of the magazine can be found on
http://www.tapr.org/tapr/html/Fpsr.html

Six Month Membership Extension for Digital Communications Conference
(DCC) Articles

>From the 2003 DCC, planned for somewhere in the Eastern USA, TAPR will
be offering Six Month membership extensions for all members who have
papers published in the proceedings. Whilst we would dearly love all
authors of papers to attend the conference, we recognize that there are
reasons that members cannot attend the conference - so the requirement
is only on having your paper published. This is of course in addition
to the complimentary copy of the DCC proceedings that each author is
entitled to.

We are looking for papers on subject within the bounds of Digital
Communications, as it applies to Ham Radio, on all levels. All you need
is something to say. If you feel that you are unable to write a paper
because you do not have the time, or writing a paper is outside your
area of expertise, please contact me. I will attempt to find someone who
will be able to help you with getting the paper written.

More details on the conference itself will be made available early in
2003, along with a formal call for papers. Until then you can examine
the DCC area of the TAPR www site for details on past conferences by
looking at http://www.tapr.org/dcc/

International Membership Price Decrease

International members of TAPR will now only US$20/year for membership of
TAPR. This is a reduction of 20% bringing the membership for
international members into line with members based in North America.

Darryl VK2TDS
TAPR Board Member

Darryl Smith, VK2TDS   POBox 169 Ingleburn NSW 2565 Australia
Mobile Number 0412 929 634 [+61 4 12 929 634 International]
Darryl@radio-active.net.au | www.radio-active.net.au

You are currently subscribed to dsp as: lyris.dsp@tapr.org

To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Jarkko Vuori contact or qrmqrn.asm expertise

From: Jerry Hancock <jehancoc@pacbell.net>
Date: Wed, 18 Dec 2002 19:16:30 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-111592-2002.12.18-22.01.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

A person named Jarkko Vuori authored a piece of code called qrmqrn.asm for
the dsp56002evm.

I have the code working but it has a bug when the lmslen parameter exceeds
101. I have a great deal of experience with the dsp56002evm but for the
life of me, after hours of debugging, I can□t seem to find the problem. It
looks like a modulo addressing jump problem.

Without single-stepping through a 101 tap lms, I am trying to find someone
that is familiar with the problem or code.

I plan to port the code to a higher performance dsp from motorola one I get
it working on the 56002.

Thank you,

Please contact jehancoc@pacbell.net <mailto:jehancoc@pacbell.net> directly
or through the list.

3. Your confirmation is needed (ok 3532)

From: Lyris <unsubscribe-confirm@lists.tapr.org>
Date: Thu, 19 Dec 2002 06:33:23 -0500
To: lyris.dsp@tapr.org
Message-ID: <LYR3532-111644-2002.12.19-06.33.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Your email address 'lyris.dsp@tapr.org' has been submitted to be
unsubscribed from the 'dsp' mailing list.

This unsubscribe command requires your confirmation that you want to be
unsubscribed.

To confirm that you do want to unsubscribe, reply to this message so that
the words "ok 3532" appear somewhere on the subject line.

Make sure that your reply message is addressed to
unsubscribe-confirm@lists.tapr.org

You will receive notification that your confirmation has been received, and
that you have been unsubscribed.

If you do not want to unsubscribe, do nothing. You will be kept on the
mailing list.

Return-Path: <bernhernandez@viwire.com>
Received: from html-email-marketing.com ([66.125.184.57]) by lists.tapr.org with SMTP (Lyris Server
version 3.0); Thu, 19 Dec 2002 06:33:20 -0500
Received: from mail pickup service by html-email-marketing.com with Microsoft SMTPSVC;
         Thu, 19 Dec 2002 01:09:09 -0800
From: "Bern Hernandez" <bernhernandez@viwire.com>
To: dsp-request
Subject:
MIME-Version: 1.0
Content-Type: multipart/alternative; boundary="----=_NextPart_000_0000_01C0D10A.511B0FA0"
Message-ID: <0251d09090913c2ENGINEEMAIL@html-email-marketing.com>
Date: 19 Dec 2002 01:09:09 -0800

Mail sent to leave-dsp-3532k was converted to these commands:
unsubscribe dsp lyris.dsp@tapr.org confirm
end

This is the text of the message that triggered the action:

Return-Path: <bernhernandez@viwire.com>
Received: from html-email-marketing.com ([66.125.184.57]) by lists.tapr.org with SMTP (Lyris Server
version 3.0); Thu, 19 Dec 2002 06:33:20 -0500
Received: from mail pickup service by html-email-marketing.com with Microsoft SMTPSVC;
         Thu, 19 Dec 2002 01:09:09 -0800

From: "Bern Hernandez" <bernhernandez@viwire.com>
To: leave-dsp-3532K@lists.tapr.org
Subject: www.mulvey.net
MIME-Version: 1.0
Content-Type: multipart/alternative; boundary="----=_NextPart_000_0000_01C0D10A.511B0FA0"
Message-ID: <0251d09090913c2ENGINEEMAIL@html-email-marketing.com>
Date: 19 Dec 2002 01:09:09 -0800

This is a multi-part message in MIME format.

------=_NextPart_000_0000_01C0D10A.511B0FA0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

View HTML version online, please click http://63.204.221.196/members/viewonline.asp?ID=79319012

www.mulvey.net
http://63.204.221.196/members/responseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&
clickon=www.mulvey.net

www.mulvey.net has recently been listed for sale. This email is to inform you that offers are being
accepted with an agent at:

http://63.204.221.196/members/responseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&
clickon=www

By clicking on the link below, you will have the opportunity to buy this domain at the list price, or to
 make a bid:

http://63.204.221.196/members/responseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&
clickon=By clicking on the link below

This domain is available on a □first-come first-serve□ basis, so act quickly.
Best regards,

Bern Hernandez

http://63.204.221.196/members/responseonline.asp?Sourceid=9301158&url=mailto:bernhernandez@viwire.com&cl
ickon=Bern Hernandez

_____
If you wish to be removed from the mailing list,
Please click http://63.204.221.196/members/unsubscribeme.asp?ID=79319012
or REPLY and write UNSUBSCRIBE in the subject line.

------=_NextPart_000_0000_01C0D10A.511B0FA0
Content-Type: text/html; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

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<input type="hidden" name="siteid" value="3607" />
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<TD>
<table width="100%">
<tr>
<td align="right">

<a onmouseover="this.style.cursor='hand'"

```
href="http://63.204.221.196/members/forwardemp.asp?ID=79319012"><img
src="http://63.204.221.196/members/forwardemp.gif" border="0" /></a>
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</tr>
</table>
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<a />
</TD>
<TD width="80%" align="center">
<a style="text-decoration:none;" onmouseover="this.style.cursor='hand'">
<font size="4">
</font>
</a>
</TD>
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style="text-decoration:none;color:#191970" onmouseout="this.style.color='#191970'">
<b>www.mulvey.net</b>
</a>

<a onmouseover="this.style.cursor='hand';this.style.color='red'" href="http://63.204.221.196/members/res
ponseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&clickon=www.mulvey.net"
style="text-decoration:none;color:#191970" onmouseout="this.style.color='#191970'">
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<font face="Arial" color="#000000" size="2">

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ponseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&clickon=www"
style="text-decoration:none;color:#000000" onmouseout="this.style.color='#000000'">
<b></b>
</a>
<br />
www.mulvey.net has recently been listed for sale. This email is to inform you that offers are being
accepted with an agent at:
<br />

<a onmouseover="this.style.cursor='hand';this.style.color='red'" href="http://63.204.221.196/members/res
ponseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&clickon=www"
style="text-decoration:none;color:#000000" onmouseout="this.style.color='#000000'">
<u>www.Nametech.com</u>
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ponseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&clickon=By clicking on the link
below" style="text-decoration:none;color:#000000" onmouseout="this.style.color='#000000'">
<b></b>
</a>
<br />
By clicking on the link below, you will have the opportunity to buy this domain at the list price, or to
 make a bid:
<br />

<a onmouseover="this.style.cursor='hand';this.style.color='red'" href="http://63.204.221.196/members/res
ponseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&clickon=By clicking on the link
below" style="text-decoration:none;color:#000000" onmouseout="this.style.color='#000000'">
<u>www.mulvey.net</u>
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<table>
<tr>
<td valign="top" align="left">
<a name="57963" />
<font face="Arial" color="#000000" size="2">
<b>This domain is available on a □first-come first-serve□ basis, so act quickly.</b>
<br />
<br />
Best regards,
<br />
</font>
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<font face="Arial" size="2">

<a onmouseover="this.style.cursor='hand';this.style.color='red'" href="http://63.204.221.196/members/res
ponseonline.asp?Sourceid=9301158&url=mailto:bernhernandez@viwire.com&clickon=Bern Hernandez">
<b>Bern Hernandez</b>
</a>
<br />
<br />

<a onmouseover="this.style.cursor='hand';this.style.color='red'" href="http://63.204.221.196/members/res
ponseonline.asp?Sourceid=9301158&url=mailto:bernhernandez@viwire.com&clickon=Bern Hernandez">
<u></u>
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21.196/members/responseonline.asp?Sourceid=9301158&url=http://www.mulvey.net/?label=1031&clickon=Click
here for more details on how to own mulvey.net">
<u>Click here for more details on how to own mulvey.net</u>
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<a>
<img border="0" alt="Image"
src="http://www.avanteing.com/en-reg/?email=leave-dsp-3532K@lists.tapr.org&label=1031" width="1%"
/></a></td>
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<p> </p>
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<table width="100%">
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<td>
<img src="http://63.204.221.196/members/powered2.asp?ID=79319012" border="0" />
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<td>
<font color="darkblue" face="arial" size="1">
  This email has been sent to you using the html-email-marketing.com online services.
   You can <a href="http://63.204.221.196/members/forwardemp.asp?ID=79319012">
<u>FORWARD</u></a> this to interested person(s). We respect your
   <a href="http://63.204.221.196/privacy.asp"><u>PRIVACY.</u></a>
    If you wish to be removed from the mailing list, Please
   <a href="http://63.204.221.196/members/unsubscribeme.asp?ID=79319012">
<u>CLICK HERE TO UNSUBSCRIBE</u></a>
   or REPLY and write UNSUBSCRIBE in the subject line.
  </font>
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<table border="0" width="100%">
</table>
</FORM>
</BODY>
</HTML>
------=_NextPart_000_0000_01C0D10A.511B0FA0--
```

4. www.etxebarria.net

From: "Bern Hernandez" <bernhernandez@viwire.com>
Date: 19 Dec 2002 05:09:20 -0800
To: lyris.dsp@tapr.org

Message-ID: <05df720091313c2ENGINEEMAIL@html-email-marketing.com>
Rendered body type: text/plain

View HTML version online, please click http://63.204.221.196/members/viewonline.asp?ID=79312999

www.etxebarria.net
http://63.204.221.196/members/responseonline.asp?Sourceid=9312992&url=http://www.etxebarria.net/?label=1031&clickon=www.etxebarria.net

www.etxebarria.net has recently been listed for sale. This email is to inform you that offers are being accepted with an agent at:

http://63.204.221.196/members/responseonline.asp?Sourceid=9312992&url=http://www.etxebarria.net/?label=1031&clickon=www

By clicking on the link below, you will have the opportunity to buy this domain at the list price, or to make a bid:

http://63.204.221.196/members/responseonline.asp?Sourceid=9312992&url=http://www.etxebarria.net/?label=1031&clickon=By clicking on the link below

This domain is available on a "first-come first-serve" basis, so act quickly.
Best regards,

Bern Hernandez

http://63.204.221.196/members/responseonline.asp?Sourceid=9312992&url=mailto:bernhernandez@viwire.com&clickon=Bern Hernandez

_____
If you wish to be removed from the mailing list,
Please click http://63.204.221.196/members/unsubscribeme.asp?ID=79312999
or REPLY and write UNSUBSCRIBE in the subject line.

5. [dsp] Re: Jarkko Vuori contact or qrmqrn.asm expertise

From: Rich Osman <Rich@osman.com>
Date: Thu, 19 Dec 2002 09:00:57 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Cc: jehancoc@pacbell.net
Message-ID: <LYR3532-111666-2002.12.19-09.46.28--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

My good friend Erik (OH2LAK) says:

>Jarkko Vuori aka Mr. DSP as we call him :)
>
>Ham call OH2LNS, email jarkko.vuori@hut.fi
>
>Regards,
>
>Erik
>
>

Jerry Hancock wrote:

> A person named Jarkko Vuori authored a piece of code called qrmqrn.asm
> for the dsp56002evm.
>
> I have the code working but it has a bug when the lmslen parameter
> exceeds 101. I have a great deal of experience with the dsp56002evm
> but for the life of me, after hours of debugging, I can't seem to find

> the problem. It looks like a modulo addressing jump problem.
>
> Without single-stepping through a 101 tap lms, I am trying to find
> someone that is familiar with the problem or code.
>
> I plan to port the code to a higher performance dsp from motorola one
> I get it working on the 56002.
>
> Thank you,
>
> Please contact jehancoc@pacbell.net <mailto:jehancoc@pacbell.net>
> directly or through the list.
>

--
mailto:Rich@Osman.com http://www.rich.osman.com
Rich Osman; POB 93167; Southlake, TX 76092 (Near DFW Airport) ARS: N1OZ

If you receive something that says "Send this to everyone you know,"
      PLEASE pretend you don't know me.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

6. [dsp] Re: Jarkko Vuori contact or qrmqrn.asm expertise <LYR31512-111666-2002.12.19-09.46.28--jehancoc#pacbell.net@lists.tapr.org>

From: Jerry Hancock <jehancoc@pacbell.net>
Date: Thu, 19 Dec 2002 09:30:59 -0800
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-111677-2002.12.19-12.16.29--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Thank you. That email bounced last night.

I did find the problem in that the pll was set low causing missed samples.

-----Original Message-----
From: bounce-dsp-31512@lists.tapr.org
[mailto:bounce-dsp-31512@lists.tapr.org]On Behalf Of Rich Osman
Sent: Thursday, December 19, 2002 7:01 AM
To: TAPR DSP Special Interest Group
Cc: jehancoc@pacbell.net
Subject: [dsp] Re: Jarkko Vuori contact or qrmqrn.asm expertise

My good friend Erik (OH2LAK) says:

>Jarkko Vuori aka Mr. DSP as we call him :)
>
>Ham call OH2LNS, email jarkko.vuori@hut.fi
>
>Regards,
>
>Erik
>
>

Jerry Hancock wrote:

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> for the dsp56002evm.
>
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> but for the life of me, after hours of debugging, I can't seem to find
> the problem. It looks like a modulo addressing jump problem.
>
> Without single-stepping through a 101 tap lms, I am trying to find
> someone that is familiar with the problem or code.
>
> I plan to port the code to a higher performance dsp from motorola one
> I get it working on the 56002.
>
> Thank you,
>

> Please contact jehancoc@pacbell.net <mailto:jehancoc@pacbell.net>
> directly or through the list.
>

--
mailto:Rich@Osman.com http://www.rich.osman.com
Rich Osman; POB 93167; Southlake, TX 76092 (Near DFW Airport) ARS: N1OZ

If you receive something that says "Send this to everyone you know,"
      PLEASE pretend you don't know me.

You are currently subscribed to dsp as: jehancoc@pacbell.net
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

January 2003

Original source file: dsp.0301
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0301

1. [dsp] Get Published and Extend Your TAPR Membership!

From: Stan Horzepa <stanzepa@earthlink.net>
Date: Fri, 03 Jan 2003 08:52:25 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-113443-2003.01.03-08.40.50--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

TAPR members:

The editorial board of Packet Status Register (PSR, the quarterly Newsletter
of TAPR) is now soliciting articles, news items, etc. for the next issue of
the newsletter. Topics related to digital Amateur Radio will be given
preference and the editorial board reserves the right to determine what is
suitable for publication.

As a bonus, if your contribution is published in PSR, your TAPR membership
will be extended by 3 months.

E-mail your contributions to wa1lou@tapr.org ASAP because the deadline for
the next issue of the newsletter is January 26.

73,

Stan Horzepa, WA1LOU, PSR Editor

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Hilbert Transformer

From: "Halvor Liland" <Halvor.Liland@bo.online.no>
Date: Sat, 11 Jan 2003 18:10:40 +0100
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114588-2003.01.11-10.43.15--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

I am working with a DSP project, and I need a Hilbert Transformer.

I am using the kernel h(t)=1/(pi*t) or in discrete h(n)=1/(pi*(n/N)). The phase shift is pi/2, but I do
not get constant amplitude. The amplitude decreases with increasing frequency.

Is my formula to compute the kernel wrong, or?

73 de LA7BO Halvor

3. [dsp] Re: Hilbert Transformer

From: Jeffrey Austen <jausten@tntech.edu>
Date: Sat, 11 Jan 2003 12:21:00 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-114606-2003.01.11-13.08.04--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The formula for h(t) is correct but the function is both non-causal and
of infinite length so the implementation is not straightforward. Look
at the comp.dsp faq <http://www.bdti.com/faq/dsp_faq.htm> section 2.10
for references and a practical method.

Jeff, k9ja

On 2003.01.11 11:10 Halvor Liland wrote:
> I am working with a DSP project, and I need a Hilbert Transformer.
>
> I am using the kernel h(t)=1/(pi*t) or in discrete h(n)=1/(pi*(n/N)).
> The phase shift is pi/2, but I do not get constant amplitude. The
> amplitude decreases with increasing frequency.
>
> Is my formula to compute the kernel wrong, or?
>
> 73 de LA7BO Halvor
>

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] PSR deadline coming soon!

From: Stan Horzepa <stanzepa@earthlink.net>
Date: Sun, 19 Jan 2003 19:54:53 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-116145-2003.01.19-19.43.56--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Just a reminder: If you are interested in submitting an article for TAPR's
newsletter, Packet Status Register, the deadline is the 26th, so send me
your input ASAP.

73,

Stan, WA1LOU, PSR Editor

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

February 2003

Original source file: dsp.0302
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0302

1. [dsp] Winter 2003 Packet Status Register Available

```
From: John Ackermann   N8UR <jra@febo.com>
Date: Wed, 05 Feb 2003 11:56:10 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-119059-2003.02.05-11.45.10--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

The Winter, 2003 issue of TAPR's journal, The Packet Status Register, is
available online at http://www.tapr.org/PSR.

Its contents include:

* New 802.11 E-List
* TAPR Project Policy
* OneTech ¹02 Technical Symposium
* Book Review: 802.11 Wireless Networks
* 3D Environments and Mars: A Follow-up from the 2002 DCC
* Extending Icom OPC-581 Extension Cables for Icom IC-706s
* Digital Radio Mondiale and Amateur Radio Implications
* 2003 in Connecticut

Enjoy!

73,
John

```
----
John Ackermann    N8UR         jra@febo.com     http://www.febo.com
President, TAPR                n8ur@tapr.org    http://www.tapr.org


---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

2. [dsp] [Fwd: Announce: Upgraded Small C compiler and Assembler (DSP56800)]

```
From: Rich Osman <Rich@osman.com>
Date: Mon, 24 Feb 2003 19:12:29 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-121908-2003.02.24-20.01.08--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

saw this in comp.dsp:

==========

Upgraded versions of the Small C Compiler and Assembler for the Motorola
DSP56800 Family are now available.

Originally tested on NMI's IsoPod (see http://www.newmicros.com), the
software is reported to run on all of the 56800 series.
Information, Downloads, etc available from http://home.attbi.com/~petegray/

I should also mention that the software is free, runs in a DOS box (i.e.
from W95/98/2K/NT/XP) and Linux (tested with RedHat 8.0).
The JTAG flash loader has also been ported to Linux.
For those without JTAG, the Serial Bootloader is also now supported.
The compiler/assembler also supports interrupts, and preemptive
multithreading example code is provided, as well as example code for a wide
variety of sensors.

Regards,
-Pete.
--
!+++
! petegray@ieee.org
! http://home.attbi.com/~petegray
!---

```
--
mailto:Rich@Osman.com  http://www.rich.osman.com
Rich Osman;  POB 93167; Southlake, TX 76092 (Near DFW Airport) ARS: N1OZ
```

```
If you receive something that says "Send this to everyone you know,"
      PLEASE pretend you don't know me.



---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

3. Your confirmation is needed (ok 3532)

```
From: Lyris <unsubscribe-confirm@lists.tapr.org>
Date: Wed, 26 Feb 2003 20:42:58 -0500
To: lyris.dsp@tapr.org
Message-ID: <LYR3532-122217-2003.02.26-20.42.58--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Your email address 'lyris.dsp@tapr.org' has been submitted to be
unsubscribed from the 'dsp' mailing list.

This unsubscribe command requires your confirmation that you want to be
unsubscribed.

To confirm that you do want to unsubscribe, reply to this message so that
the words "ok 3532" appear somewhere on the subject line.

Make sure that your reply message is addressed to
unsubscribe-confirm@lists.tapr.org

You will receive notification that your confirmation has been received, and
that you have been unsubscribed.

If you do not want to unsubscribe, do nothing.  You will be kept on the
mailing list.

---

Return-Path: <bernhernandez02@viwire.com>
Received: from adsl-64-162-133-99.dsl.snfc21.pacbell.net ([66.125.184.57]) by lists.tapr.org with SMTP
(Lyris Server version 3.0); Wed, 26 Feb 2003 20:42:51 -0500
Received: (qmail 9719 invoked from network); 27 Feb 2003 02:21:22 -0000
Received: from unknown (HELO html-email-marketing.com) (192.168.1.101)
  by adsl-64-162-133-99.dsl.snfc21.pacbell.net with SMTP; 27 Feb 2003 02:21:22 -0000
Received: from mail pickup service by html-email-marketing.com with Microsoft SMTPSVC;
         Wed, 26 Feb 2003 17:12:06 -0800
From: "Bern Hernandez" <bernhernandez02@viwire.com>
To: dsp-request
Reply-To: "Bern Hernandez" <bernhernandez02@viwire.com>
Subject:
MIME-Version: 1.0
Content-Type: multipart/alternative; boundary="----=_NextPart_000_0000_01C0D10A.511B0FA0"
Message-ID: <051c90612011b23ENGINEEMAIL@html-email-marketing.com>
Date: 26 Feb 2003 17:12:06 -0800

# Mail sent to leave-dsp-3532k was converted to these commands:
unsubscribe dsp lyris.dsp@tapr.org confirm
end

# This is the text of the message that triggered the action:

Return-Path: <bernhernandez02@viwire.com>
Received: from adsl-64-162-133-99.dsl.snfc21.pacbell.net ([66.125.184.57]) by lists.tapr.org with SMTP
(Lyris Server version 3.0); Wed, 26 Feb 2003 20:42:51 -0500
Received: (qmail 9719 invoked from network); 27 Feb 2003 02:21:22 -0000
Received: from unknown (HELO html-email-marketing.com) (192.168.1.101)
  by adsl-64-162-133-99.dsl.snfc21.pacbell.net with SMTP; 27 Feb 2003 02:21:22 -0000
Received: from mail pickup service by html-email-marketing.com with Microsoft SMTPSVC;
         Wed, 26 Feb 2003 17:12:06 -0800
From: "Bern Hernandez" <bernhernandez02@viwire.com>
To: leave-dsp-3532K@lists.tapr.org
Reply-To: "Bern Hernandez" <bernhernandez02@viwire.com>
Subject: www.mulvey.net
MIME-Version: 1.0
Content-Type: multipart/alternative; boundary="----=_NextPart_000_0000_01C0D10A.511B0FA0"
Message-ID: <051c90612011b23ENGINEEMAIL@html-email-marketing.com>
Date: 26 Feb 2003 17:12:06 -0800

This is a multi-part message in MIME format.
```

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Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

View HTML version online, please click http://63.204.221.196/members/viewonline.asp?ID=815310605
www.mulvey.net is still available
http://63.204.221.196/members/responseonline.asp?Sourceid=15277709&url=http://www.mulvey.net/?label=1031
&clickon=www.mulvey.net is still available

There has been a lot of activity but the domain has not sold yet.

http://63.204.221.196/members/responseonline.asp?Sourceid=15277709&url=http://www.mulvey.net/?label=1031
&clickon=There has been a lot of activity but the domain has not sold yet

With domain ownership, you get exclusive rights to www.mulvey.net. You can set up your own family or
business website and create your choice of email addresses (like, Your name@mulvey.net).

http://63.204.221.196/members/responseonline.asp?Sourceid=15277709&url=http://www.mulvey.net/?label=1031
&clickon=With domain ownership

Best regards,

Bern Hernandez

http://63.204.221.196/members/responseonline.asp?Sourceid=15277709&url=mailto:bernhernandez@viwire.com&c
lickon=Bern Hernandez

_____
If you wish to be removed from the mailing list, please click
http://63.204.221.196/members/unsubscribeme.asp?ID=815310605 .

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Content-Transfer-Encoding: 7bit

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<b>www.mulvey.net is still available</b>
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activity but the domain has not sold yet" style="text-decoration:none;color:#000000"
onmouseout="this.style.color='#000000'">
<b></b>
</a>
<br />
There has been a lot of activity but the domain has not sold yet.<br />

<a onmouseover="this.style.cursor='hand';this.style.color='red'" href="http://63.204.221.196/members/res
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activity but the domain has not sold yet" style="text-decoration:none;color:#000000"
onmouseout="this.style.color='#000000'">
<u>Act quickly before this unique opportunity disappears.</u>
</a>
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style="text-decoration:none;color:#000000" onmouseout="this.style.color='#000000'">
<b></b>
</a>
<br />
With domain ownership, you get exclusive rights to www.mulvey.net. You can set up your own family or
business website and create your choice of email addresses (like, Your name@mulvey.net).<br />

<a onmouseover="this.style.cursor='hand';this.style.color='red'" href="http://63.204.221.196/members/res
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style="text-decoration:none;color:#000000" onmouseout="this.style.color='#000000'">
<u>www.mulvey.net</u>
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<b></b>
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<br />
Best regards,
<br />
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<b>Bern Hernandez</b>
</a>
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here for more details on how to own mulvey.net">
<u>Click here for more details on how to own mulvey.net</u>
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   You can <a href="http://63.204.221.196/members/forwardemp.asp?ID=815310605">
<u>FORWARD</u></a> this to interested person(s). We respect your
   <a href="http://63.204.221.196/privacy.asp"><u>PRIVACY.</u></a>
    If you wish to be removed from the mailing list, Please
   <a href="http://63.204.221.196/members/unsubscribeme.asp?ID=815310605">
<u>CLICK HERE TO UNSUBSCRIBE</u></a>
   or REPLY and write UNSUBSCRIBE in the subject line.
  </font>
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</FORM>
</BODY>
</HTML>
------=_NextPart_000_0000_01C0D10A.511B0FA0--
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4. www.etxebarria.net

From: "Bern Hernandez" <bernhernandez02@viwire.com>
Date: 27 Feb 2003 11:56:48 -0800
To: lyris.dsp@tapr.org
Message-ID: <04c6d4856191b23ENGINEEMAIL@html-email-marketing.com>
Rendered body type: text/plain

View HTML version online, please click http://63.204.221.196/members/viewonline.asp?ID=815313084
www.etxebarria.net is still available
http://63.204.221.196/members/responseonline.asp?Sourceid=15303593&url=http://www.etxebarria.net/?label=1031&clickon=www.etxebarria.net is still available

There has been a lot of activity but the domain has not sold yet.

http://63.204.221.196/members/responseonline.asp?Sourceid=15303593&url=http://www.etxebarria.net/?label=1031&clickon=There has been a lot of activity but the domain has not sold yet

With domain ownership, you get exclusive rights to www.etxebarria.net. You can set up your own family or business website and create your choice of email addresses (like, Your name@etxebarria.net).

http://63.204.221.196/members/responseonline.asp?Sourceid=15303593&url=http://www.etxebarria.net/?label=1031&clickon=With domain ownership

Best regards,

Bern Hernandez

http://63.204.221.196/members/responseonline.asp?Sourceid=15303593&url=mailto:bernhernandez@viwire.com&clickon=Bern Hernandez

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If you wish to be removed from the mailing list, please click
http://63.204.221.196/members/unsubscribeme.asp?ID=815313084 .

March 2003

Original source file: dsp.0303
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0303

1. [dsp] TAPR Monthly Update

From: John Ackermann N8UR <jra@febo.com>
Date: Sun, 02 Mar 2003 18:40:34 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-122828-2003.03.02-18.30.13--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

(Sent on behalf of Darryl, VK2TDS, TAPR Membership Director -- mailto:
vk2tds@tapr.org)

People

TAPR Membership

Running TAPR takes resources, and as a non-profit organisation we rely
on members for part of our funding. If you support the work that TAPR is
doing, we would welcome your membership of the organisation. You can
join by clicking on http://www.tapr.org/tapr/html/orgf.html . We have
also been listening to members requesting that we support electronic
commerce. TAPR are currently testing the use of PayPal in association
with the current ordering system on the Web. We will post a message on
the WWW site as soon as this is available.

Until then you can still join. Just fill out the electronic form as
normal, and state in the comments that you want to pay with PayPal when
it is available.

Digital Communications Conference

This years DCC will take place at the Hartford/Windsor Marriott Airport
Hotel in Windsor, Connecticut, on the weekend of September 19-21, 2003.
The hotel is 6 miles south of Bradley International Airport (BDL) and 13
miles north of ARRL Headquarters in Newington. Information will soon be
available on http://www.tapr.org/tapr/html/conff.html. Until then you
can find more information in the PSR at
ftp://ftp.tapr.org/psr/Winter_86_2003.pdf

We will soon be issueing a call for papers for this event. Have a think
about what you want to write about and start planning your paper now. If
you are unable to come up with a subject, it is often possible to find
friends with something to write about, but who don't have the time. You
can help your friend and the Ham community by writing the paper on their
behalf. There will be two popular discussion points at the conference -
Software Defined Radios and 802.11 networks.

DCC Conference Proceedings

We have also reduced the price of each of the proceedings of the DCC up
until 1997 to only US$6 each. This makes the a real bargain. We are also
making available sets of volume 1-10 and 11-16 available for US33 each
- but please bear in mind that we no longer have copies of a number of
the proceedings so we cannot guarenttee that the sets will be complete.

Electronic Distribution of Packet Status Register (PSR) Magazine

Listening to members we have found that many people are concerned about
missing out on the PSR now that it has gone electronic. We recognise
this as an issue, and we have come up with a solution to make things a
bit easier in this digital age. We have created two mailing lists to
assist you with keeping up to date with the quarterly magazine. They are

        PSR-Announce
        PSR-PDF

PSR-Announce is designed to advise the availability of the PDF file for
download. We recognise that many people are on slow internet connections
at home, or in fact have to pay for their bandwidth. So we have created
a mailing list just to tell you when the magazine comes out, and to let
you know how to get it. You can subscribe by visiting

http://www.tapr.org/cgi-bin/lyris.pl?enter=psr-announce&text_mode=0

PSR-PDF is designed for people who have a faster internet connection, or who know that they will never get to read it unless it is sent directly to them. Since PSR often contains graphics, the file can be over one mByte. You can subscribe by clicking http://www.tapr.org/cgi-bin/lyris.pl?enter=psr-pdf&text_mode=0

802.11 Mailing List

Whilst we are on the subject of mailing list, TAPR have started a mailing list for 802.11 'Wireless Internet' operations. It seems that every community has a mailing list dedicated to 802.11. So how is the TAPR one different? It is dedicated to 802.11 use in ham radio. The list contains active members of the entire range of technical ability - from the most basic understanding of how radio works, to the deep internals of this equipment. Such a broad range that everyone is sure to fit in. You can join by visting http://www.tapr.org/cgi-bin/lyris.pl?enter=ham-80211&text_mode=0

GNUradio receives HDTV

Matt Etus and the other people at the GNUradio project have announced that they have managed to decode the HDTV data stream on their PC's and have published the source code online. This is an amazing feat by Matt and the team. They are not quite to the stage of real time HDTV decoding on a PC, but are close.

Write for PSR!!!

PSR needs articles, and we would love to publish lots more in the PSR magazine. PSR is a great place to publish articles on everything from local operating practices to deep technical papers. And since the last issue TAPR is now rewarding those people who are helping others by writing articles for the magazine. Following the last issue, six people had their memberships extended by three months. This is just a small thank you from us at TAPR to those people who help us out. More details on PSR can be found on www.tapr.org

Conclusion

I hope you have found this document informative and useful. TAPR is always looking for new things to do and how to improve what it is already doing. If you have any ideas or concerns, please email me on darryl@radio-active.net.au

Darryl

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] EVM=RI

From: John Koster <w9ddd@tapr.org>
Date: Tue, 4 Mar 2003 21:04:20 -0600 (CST)
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-123336-2003.03.04-21.53.23--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

A while back someone called the office looking for an EVM=RI kit. At the time I didn't think we had any.

When we recently did an inventory I found a few in the box that had gotten lost behind some other things.

I've been looking high and low for the notes I took from that call, but can't find the person's name or contact information. So I thought I'd post a message here in case they read this list.

John Koster, W9DDD
<w9ddd@tapr.org>

```
  ======================================================================
None of the above represents the opinion or policy of anyone or any entity
other than John Koster unless expressly so stated above.

E-mail addresses provided within the header and body of this message are
provided only for the purpose of replying to this electronic
correspondence and no rights are granted for any other use.



---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

3. [dsp] dsp-93

```
From: Charlie Wood <cwood@elp.rr.com>
Date: Thu, 06 Mar 2003 06:48:15 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-123587-2003.03.06-08.35.52--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

```
Years ago I built a TAPR  DSP-93 and it worked great. I managed to use the
available software to do just what I wanted. Learned ALOT!
Now I dragged the DSP-93 out and hooked it up, then looked around the net
to see if anybody kept up with it........no luck.
Anyone still using these? Are they worth anything?

Charlie wa5kyv

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

4. [dsp] Re: dsp-93

```
From: Beni Muhamad <bmuhamad@medan.oilfield.slb.com>
Date: Thu, 06 Mar 2003 23:22:14 -0600
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-123693-2003.03.06-23.08.27--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
```

```
Of course I need it, but is there available the schematic, the binary and
application software for public ?
It could be nice if you can share with me.

73, Beni



At 06:48 AM 3/6/2003 -0700, you wrote:
>Years ago I built a TAPR  DSP-93 and it worked great. I managed to use the
>available software to do just what I wanted. Learned ALOT!
>Now I dragged the DSP-93 out and hooked it up, then looked around the net
>to see if anybody kept up with it........no luck.
>Anyone still using these? Are they worth anything?
>
>Charlie wa5kyv
>---
>You are currently subscribed to dsp as: bmuhamad@slb.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org


---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
```

5. [dsp] Re: dsp-93

```
From: Charlie Wood <cwood@elp.rr.com>
Date: Fri, 07 Mar 2003 13:36:22 -0700
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-123778-2003.03.07-15.24.03--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain
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Yes there are manuals, programing info, and schematics. I have almost all
the info in a 3 ring binder but all is available at:
http://www.tapr.org/tapr/html/Fdsp93.html
Nice unit but like Mike in a previous post said.......most are using fast
computers and sound cards now......
```

Charlie

At 11:22 PM 03/06/2003 -0600, you wrote:

>Of course I need it, but is there available the schematic, the binary and
>application software for public ?
>It could be nice if you can share with me.
>
>73, Beni
>
>
>
>At 06:48 AM 3/6/2003 -0700, you wrote:
>>Years ago I built a TAPR DSP-93 and it worked great. I managed to use
>>the available software to do just what I wanted. Learned ALOT!
>>Now I dragged the DSP-93 out and hooked it up, then looked around the net
>>to see if anybody kept up with it........no luck.
>>Anyone still using these? Are they worth anything?
>>
>>Charlie wa5kyv
>>---
>>You are currently subscribed to dsp as: bmuhamad@slb.com
>>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org
>
>
>---
>You are currently subscribed to dsp as: cwood@elp.rr.com
>To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

---
You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

April 2003

Original source file: dsp.0304
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0304

1. [dsp] publish or perish

From: Stan Horzepa <stanzepa@earthlink.net>
Date: Tue, 01 Apr 2003 19:38:06 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-127132-2003.04.01-19.31.26--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Here is your chance to become rich and famous! Well, maybe not rich, but
certainly famous.

The editorial board of Packet Status Register (PSR, TAPR□s quarterly
newsletter) is now soliciting articles, news items, etc. for the next issue
of the newsletter. Topics related to digital Amateur Radio will be given
preference and the editorial board reserves the right to determine what is
suitable for publication.

E-mail your contributions to wa1lou@tapr.org ASAP because the deadline for
the next issue of the newsletter is April 24.

Don't forget, if you are a TAPR member, you will add three months to your
TAPR membership for every article that is published in PSR.

73,

Stan Horzepa, WA1LOU, PSR Editor

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

2. [dsp] Digital BASH at Hamvention

From: John Ackermann N8UR <jra@febo.com>
Date: Fri, 11 Apr 2003 16:40:06 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-128251-2003.04.11-16.32.37--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Announcing the 2003 TAPR Digital BASH!

What?
        An event for the digitally-inclined ham, featuring:
        * Buffet dinner
        * Keynote Address: A Software Defined Radio for the Masses,
            by Gerald Youngblood, AC5OG
        * TAPR special interest group meetings
        * "Birds of a Feather" gatherings

When?
        Friday evening, May 16, 2003
        Doors open at 7:00 pm; dinner served at 7:30 pm
        Speaker and meetings after dinner

Where?
        Kohler's Banquet Center, 4548 Presidential Way, Kettering
        (39 40.75N, 84 08.43W), just south of East David Road between Far
        Hills Ave. and Wilmingon Pike. Maps available on the TAPR web site
        (http://www.tapr.org/tapr/dayton, follow the link at the bottom of the
page),
        or at the TAPR booth.

How?
        Dinner requires advance registration and payment through TAPR.
        Tickets will be available at the TAPR booth on Friday, though
        we strongly encourage registration <before> Hamvention. The
        cost is $25.00 per person, tax and tip included.

        All amateurs are welcome to attend, enjoy the speaker, and
        participate in the meetings, although only those purchasing a
        dinner can eat.

To register, contact:
        Digital BASH
        c/o TAPR
        8987-309 E. Tanque Verde Road #337
        Tucson, AZ   85749-9399
        Phone: 972-671-TAPR (8277)
        Fax: 972-671-8716
        Internet: tapr@tapr.org

        Visa/Mastercard Accepted

Who?
        PACK*BASH is co-sponsored by TAPR -- Tucson Amateur Packet
        Radio, the national leader in digital communication -- and the
        Miami Valley FM Association, Dayton's packet radio club.

For more information (including maps), go to
http://www.tapr.org/tapr/dayton,
 or send email to tapr@tapr.org.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Packet Status Register deadline nears

From: Stan Horzepa <stanzepa@earthlink.net>
Date: Mon, 21 Apr 2003 19:38:40 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-129450-2003.04.21-19.38.49--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The deadline for the next issue of Packet Status Register (PSR), TAPR's
quarterly newsletter, is Thursday, April 24, so please get your submissions
to me as quick as a bunny!

73,

Stan, WA1LOU

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May 2003

Original source file: dsp.0305
Source: http://ftp.tapr.org/tapr_history/SIG_Archives/dspsig/mail_archive/dsp.0305

1. [dsp] Spring 2003 issue of Packet Status Register (PSR) now available

From: Stan Horzepa <stanzepa@earthlink.net>
Date: Mon, 05 May 2003 20:00:28 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-131517-2003.05.05-19.53.59--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

The Spring 2003 issue of Packet Status Register (PSR), TAPR's quarterly
newsletter is now available at the TAPR web site (www.tapr.org).

This issue of PSR has the following contents:

802.11b Used in Ham's Shuttle Recovery Efforts by Doug Kilgore, KD5OUG

A New Tactical Reporting Protocol by Scott Miller, N1VG

Announcing N2YGK's Linux aprsdigi Version 2.4.3 3 by Alan
Crosswell, N2YGK

APRS IP Mobile in a Non-Dynamic Wireless Environment or 802.11 APRS by
Darryl Smith, VK2TDS

Portable Tactical Digital Communications Using Off-the-Shelf Consumer
Components by Ed Carp, N7EKG

President's Corner: Dayton, Directors and the DCC by John Ackermann, N8UR

Real Networking: Is It the Key to Keeping & Reviving Packet? by Ron Sauer,
K9RKI

Revitalizing "Plain" Packet by Jim Wagner, KA7EHK

TAPR and ARRL 22nd Annual Digital Communications Conference

TAPR Membership by Darryl Smith, VK2TDS

TAPR Order Form

WA8WDQ Replaces K0PFX on TAPR Board

Welcome to Jeannie, The House That Listens by Don Marquardt, K9SOA

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2. [dsp] Re: Spring 2003 issue of Packet Status Register (PSR) now available

From: Beni Muhamad <bmuhamad@medan.oilfield.slb.com>
Date: Tue, 06 May 2003 08:42:52 -0500
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-131557-2003.05.05-21.43.33--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Stan and everybody,

Do you have a nice UHF signal generator project article/documentation ?
let me know as quick as ferrari.

Thank so much,
Beni.

You are currently subscribed to dsp as: lyris.dsp@tapr.org
To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

3. [dsp] Last Reminder: Hamvention Digital Bash!

From: "John R. Ackermann N8UR" <jra@febo.com>
Date: Tue, 13 May 2003 10:15:19 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-132606-2003.05.13-10.12.02--lyris.dsp#tapr.org@lists.tapr.org>

Rendered body type: text/plain

Just a reminder that the annual TAPR Digital BASH will be held Friday
evening at Hamvention. Our keynote speaker will be Gerald Youngblood,
AC5OG, who will describe -- and demonstrate -- his HF software defined
radio, the SDR-1000. I have been playing with the SDR-1000 myself, and it
is a real step forward for ham SDR experimentation. If you're at
Hamvention, you'll want to hear Gerald and see the radio in action.

Tickets are $25 and will be available at the TAPR booth up until about 3:45
Friday afternoon, when we have to call in the final count. Directions to
the banquet hall will also be available at the booth.

And, remember that TAPR will have a bigger and better presence at
Hamvention this year. Our new booth spaces are 607, 608, and 615, just a
little bit down and over from our old spot.

See you there!

73,
John N8UR

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To unsubscribe send a blank email to leave-dsp-3532K@lists.tapr.org

4. [dsp] Call for Papers

From: Stan Horzepa <stanzepa@earthlink.net>
Date: Tue, 20 May 2003 20:45:42 -0400
To: "TAPR DSP Special Interest Group" <dsp@lists.tapr.org>
Message-ID: <LYR3532-133567-2003.05.20-20.43.30--lyris.dsp#tapr.org@lists.tapr.org>
Rendered body type: text/plain

Technical papers are solicited for presentation at the 22nd Annual ARRL and
TAPR Digital Communications Conference to be held September 19-21, 2003 in
Hartford, Connecticut, and publication in the Conference Proceedings. Annual
conference proceedings are published by the ARRL. Presentation at the
conference is not required for publication. Submission of papers are due by
August 5th, 2003 and should be submitted to:

Maty Weinberg, ARRL
225 Main Street
Newington, CT 06111

or via the Internet to
maty@arrl.org

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